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ARIZONA LABOR MARKET INFORMATION NEWSLETTER

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October 1991

Unemployment Rate

Seasonally Adjusted
August*

ARIZONA	–	5.3%
Maricopa Co.	–	4.6
Pima Co.	–	3.6
United States	–	6.8

Consumer Price Index

U.S. – August 1991
Base = 1982-84

Wage Earner/Clerical Worker	–	134.6
% Chg. Year Ago	–	3.6
All Urban	–	136.6
% Chg. Year Ago	–	3.8

Phoenix – 2nd Qtr 1991
Base = 1982-84

All Urban	–	136.3
% Chg. Year Ago	–	3.4

Tucson CPI No Longer Available (see May 1991 *Arizona LMI Newsletter*)

* Preliminary

'90 Annual Pay

Arizona Wages Continued to Grow Slower Than Rest of Country

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Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

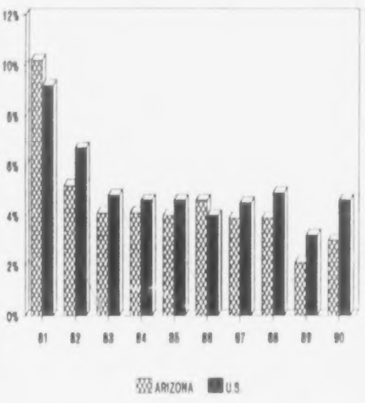
Growth in Arizona Annual Pay Lags Nation Again in '90

Players on professional sports teams or entertainers may have a hard time adjusting to *just* an annual cost-of-living pay increase, but the average Arizona worker in 1990 — and in recent years — probably would have given a standing ovation if they had received a pay gain equal to last year's rise in the Consumer Price Index (5.4 percent).

In fact, the way average annual pay in Arizona has grown (or not grown) in the last decade, workers in this state may be satisfied in *any* year with pay gains equal to the CPI rise. Because, as they say in sports lexicon, Arizona's workers have been riding a streak — unfortunately, its four-straight years (and eight out of the last nine) of pay growth below the national average. But even more distressing is the fact that Arizona's 3.0 percent rise in average annual pay in 1990 ranked 49th in percentage growth among all states and Washington D.C.; the second-straight year the state has placed 49th in pay growth.

According to preliminary data released in August by the U.S. Department of Labor's Bureau of Labor Statistics (BLS), average annual pay for Arizona workers covered by state and federal unemployment insurance programs grew to a level of $21,443 in 1990, compared to $20,809 the year before. Nationally, average annual pay grew 4.6 percent to $23,602 in 1990, up from $22,563 in 1989.

Figure 1. **Average Annual-Pay Growth , Arizona vs. U.S., 1980-1990**



Source: U.S. Dept. of Labor, Bureau of Labor Statistics; and Arizona Dept. of Economic Security, Research Administration, 1980-1990

Somewhat surprisingly, despite the state's poor showing in 1990, Arizona's overall pay ranking among states and Washington D.C. remained the same as the prior year, 26th, but is still down from 24th in 1988 and 21st in 1986. But not surprisingly, according to preliminary figures released in September, the state's two major metropolitan statistical areas (MSAs) also took a beating last year in the average annual-pay race among 320 MSAs tracked separately by BLS.

Compared to an average MSA increase in 1990 of 4.7 percent, average annual pay in the Phoenix metro area rose just 3.2 percent over 1989 to $22,660, while the Tucson metro area's pay inched up a meager 0.8 percent to $19,761. Yuma, which attained MSA status for the first time in 1990, had 3.8 percent annual-pay growth over 1989 to a level of $16,231. Nationally, MSA pay averaged $24,675 in 1990.

Phoenix, Tucson MSAs Fall in Rankings

The subpar growth last year in the Phoenix and Tucson MSAs was reflected in rankings among all MSAs — in terms of yearly increases and overall rankings. Looking at pay growth over 1989, the Phoenix and Tucson areas ranked 270th and 314th, respectively. And overall the Phoenix MSA ranked 99th in 1990, compared to 84th in 1989 and 80th in 1987, while Tucson fell to 225th from 198th in 1989 and 188th in 1987.

But more disturbing, as Figure 2 shows, the Phoenix metro area as of 1990 trailed

Decade of Subpar Increases Due to Several Factors

Over the past decade Arizona's annual seasonally adjusted unemployment rate was consistently lower than the country as a whole. And during that time the state's non-farm wage and salary employment grew more than twice as fast as the national average (47 percent vs. 21.6 percent), while consumer prices for the nation and the Phoenix metro area — where two-thirds of the state's workers reside — increased about the same.

One might surmise from those statistics alone — lower unemployment rates, faster job growth, and similar cost-of-living increases — that wages in Arizona would have increased faster than or at least equal to the national average during that period. But just the opposite was true. Annual growth in Arizona wages remained below U.S. averages eight out of the last 10 years, and in the past several years the difference became even more pronounced.

What gives? Actually, "My dear Watson," it's not as mysterious as a Sherlock Holmes' case. There have been several causes of Arizona's pay-growth malaise, some of which are cyclical and others that appear to have no end in sight. Among these are:

- a continued higher share of service-producing jobs in Arizona than the nation as a whole with significantly faster growth in the state's service-producing industries the past two years.
- an inability for the state to overcome a 50 percent drop in mining jobs in the early 1980s and a 30 percent drop in construction positions since construction employment peaked in 1986.
- a manufacturing sector that boomed in the early part of the decade, but which has been sluggish ever since

(Continued on page 5)

the national MSA pay average by 8.9 percent, or $2,015, compared to 5.2 percent, or $637, in 1980. And the Tucson MSA fell behind the MSA average last year by $4,914, or 19.9 percent, compared to 9.9 percent, or $1,321, a decade earlier.

Table 1. Average Annual Pay and Percentage Change for U.S. and Selected States for All Covered Workers, 1989-90[1]

State	Rank by Pay	Average Annual Pay 1990[2]	Average Annual Pay 1989	Pct. Chg.	Rank by Chg.[3]
United States	—	$23,602	$22,563	4.6%	—
Washington D.C.	1	33,717	32,106	5.0	13
Alaska	2	29,946	29,704	0.8	51
California	7	26,180	24,917	5.1	9
Hawaii	13	23,167	21,624	7.1	1
Colorado	15	22,908	21,940	4.4	31
Washington	19	22,646	21,617	4.8	21
Nevada	22	22,358	21,333	4.8	20
Arizona	**26**	**21,443**	**$20,809**	**3.0**	**49**
Oregon	27	21,332	20,303	5.1	10
Utah	39	20,074	19,362	3.7	47
New Mexico	43	19,347	18,667	3.6	48

Notes:

1. Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs.
2. Data are preliminary.
3. Percent changes were computed from unrounded average annual pay data and may differ from those computed using data rounded to the nearest dollar.

Source: U.S. Department of Labor, Bureau of Labor Statistics, August 1991

Focusing on specific Arizona industry data in 1990, as might be expected there were few bright spots, but there were several disturbing statistics of note:

- Despite moderately higher overall pay growth in 1990 than 1989 (3.0 percent vs. 2.1 percent), all of the state's major industry groups last year had lower average-pay gains than their respective sectors nationally (Table 2). In 1989 average annual pay in three major industry groups in Arizona — manufacturing, TCPU (transportation, communications and public utilities), and wholesale trade — rose faster than their national counterparts.

- Services led all of Arizona's sectors in pay growth with a 4.7 percent gain, but it was still well below the national average gain of 6.0 percent. An increase in the minimum wage (affecting hotel services) and soaring medical costs (affecting health services) probably accounted for most of the wage increases in services nationally as well as in Arizona.

- Despite strong over-the-year employment growth in Arizona's public sector (4.4 percent, according to non-farm payroll job data), Arizona's government workers had pay gains of only 2.0 percent. Interestingly, Arizona's government sector pulled down the state's overall pay average, while in surrounding states — Nevada, New Mexico, California, and Utah — the government sector pulled up state averages.

- As expected, savings and loan problems were reflected in poor wage gains in the FIRE (finance, insurance, and real estate) and construction sectors. But on the other hand, significant non-farm payroll employment gains (6.6 percent) in TCPU were not represented in 2.7 percent wage gains for the industry. Major layoffs affecting professional positions at the state's two largest utilities may have contributed to TCPU's lackluster performance.

Specific reasons for Tucson's and Phoenix' fall-off in pay growth last year would tend to parallel industry data for the state as a whole. But the more pronounced drop-off in Pima County is probably partially due to a 5.0 percent loss in manufacturing non-farm payroll employment over 1989, compared to only a 1.1 decline in Maricopa County. Also, TCPU and government employment grew significantly faster in the Phoenix area (8.8 percent and 5.1 percent, respectively) than in the Tucson area (1.1 percent and 3.4 percent, respectively).

Looking at the nation as a whole, Washington D.C. led all states in average annual pay in 1990 with an average of $33,717, followed by Alaska ($29,946), Connecticut ($28,995), New York ($28,873), and New Jersey ($28,449). Bringing up the bottom were South Dakota ($16,430), North Dakota ($17,626), and Mississippi ($17,626).

In terms of growth, Hawaii had the largest increase in average annual pay between 1989 and 1990, 7.1 percent, followed by New Jersey (6.2 percent) and Rhode Island (6.0 percent). Hawaii's sharp pay growth helped move it up five places in the overall rankings in 1990 to 13th. The two states with smaller pay growth than Arizona were Alaska (0.8 percent) and Michigan (2.5 percent).

Among metro areas in 1990, Bridgeport-Stamford-Norwalk-Danbury, Conn., led all MSAs with an average annual-pay level of $34,313, followed by New York City ($33,669), San Jose, Calif. ($32,351), and Anchorage, Alaska ($30,957). These four metro areas had the same rankings in 1989. Recording the lowest average annual pay for an MSA, at $14,603, was Jacksonville, N.C., just ahead of McAllen-Edinburg-Mission, Tex. ($14,783).

Lexington-Fayette, Ky., led all metropolitan areas in percentage growth in average annual pay with an increase of 9.1 percent. Two MSAs experienced pay declines between 1989 and 1990 — Odessa, Tex., -0.7 percent; and Kokomo, Ind., -0.1 percent.

BLS data on average annual pay are compiled from federal and state UI payroll reports submitted by employers on 108 million workers, about 92 percent of total civilian employment.[2] Included in pay totals are bonuses, cash value of meals and lodging, tips and other gratuities, and employer contributions to certain deferred-compensation plans.

Major exclusions from these data include: most agricultural workers on small farms; all members of the military; most elected officials, railroad employees, domestic workers, and student workers at schools; employees of certain small, non-profit organizations; self-employed individuals; and all unpaid members of family businesses.

Average annual pay is determined by dividing total annual pay of full- and part-time employees by the average monthly number of employees. Caution is advised when using these data, however, as certain factors can skew pay averages. Among these are the ratio of full-time to part-time workers, and number of individuals in high-paying and low-paying occupations.

Table 2. Average Annual Pay and Percent Change by Industry for U.S. and Arizona, 1989-90[1]

	Average Annual Pay		Pct. Chg.[3]
	1990[2]	1989	
United States			
Private Industry[4]	**$23,258**	**$22,269**	**4.4%**
Mining	37,149	35,787	3.8
Construction	26,150	25,213	3.7
Manufacturing	28,881	27,749	4.1
Transportation, Communications, and Public Utilities	30,034	28,913	3.9
Wholesale Trade	30,034	28,634	4.9
Retail Trade	12,709	12,284	3.5
Finance, Insurance, and Real Estate	29,683	28,303	4.9
Services	22,006	20,764	6.0
Government	**25,361**	**24,094**	**5.3**
Arizona			
Private Industry[4]	**$20,892**	**$20,243**	**3.2%**
Mining	35,254	34,027	3.6
Construction	22,061	21,603	2.1
Manufacturing	29,090	28,404	2.4
Transportation, Communications, and Public Utilities	27,814	27,082	2.7
Wholesale Trade	26,696	25,660	4.0
Retail Trade	12,474	12,228	2.0
Finance, Insurance, and Real Estate	25,145	24,714	1.7
Services	19,921	18,988	4.9
Government	**24,085**	**23,602**	**2.0**

Notes:

1.-3. See Table 1.

4. Includes data for industries in addition to those shown separately.

Source: U.S. Department of Labor, Bureau of Labor Statistics, August 1991

—Brent Fine
Arizona LMI Newsletter Editor; and
U.S. Department of Labor, Bureau of Labor Statistics

Notes:

1. Metropolitan areas are defined as either metropolitan statistical areas (MSAs) or primary metropolitan statistical areas (PMSAs). An MSA is a city that has at least a population of 50,000 within its corporate limits or contains a U.S. Bureau of Census-defined "urbanized area" of at least 50,000 in population and has a total population of at least 100,000. A PMSA is an area within an MSA that either was recognized as a separate standard metropolitan statistical area (SMSA) as of January 1, 1980, or which has a population of 100,000 with at least 60 percent of the population urban and less than 50 percent of the resident workers commuting to jobs outside the area.

2. Data on average annual pay are the product of a federal-state cooperative program in which state employment security agencies (SESAs) prepare summaries of employment and total pay of workers covered by unemployment insurance (UI) legislation. The summaries are a byproduct of the administration of state UI programs, which require most employers to pay quarterly taxes based on wages of workers covered by UI.

AVERAGE ANNUAL PAY

Wage Malaise

(Continued from page 2)

with growth only coming in lower-paying, non-durable goods industries.

- an expansion of the part-time workforce with growth in recent years at rates 3 1/2 times greater than the rest of the country.

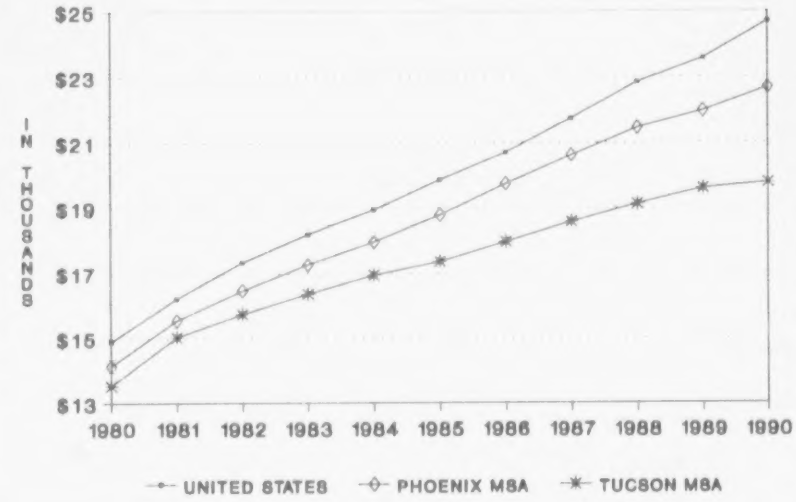
The service-producing sector, which dominates Arizona's economy, continued to expand at significant rates between 1980 and 1990 (58.8 percent). Unfortunately, the service-producing sector — services, FIRE (finance, insurance, and real estate), TCPU (transportation, communications, and public utilities), trade, and government — tends to pay lower wages than the goods-producing sector (manufacturing, construction, and mining), which only grew 11.3 percent during that same period.

The service-producing sector's share of non-farm payroll employment in Arizona increased from 75.1 percent in 1980 to 81.2 percent in 1990, while nationally it rose from 71.6 percent to 77.3 percent. Although the net change in the state's and nation's share of service-producing jobs over that period was not dramatic (6.1 percent 5.7 percent), it was still unfavorable for wage gains in the state — with the gap widening during the past two years.

Between January 1989 and December 1990 non-farm payroll employment in Arizona's service-producing sector expanded 7.6 percent, compared to 5.8 percent for the rest of the country. At the same time goods-producing jobs in Arizona declined 4.8 percent versus a loss of 1.4 percent for the nation. The result: the state's share of service-producing jobs grew much faster than the U.S. share in 1989 and 1990, keeping wage increases down.

Another major factor restraining growth in Arizona wages the past 10 years was the loss of nearly one-half of the state's wage and salary mining jobs in the early '80s and a drop of nearly one-third of non-farm payroll construction positions in the latter part of the decade. Mining is the highest-paying major industry group in Arizona, while construction pay is slightly above the state's average (see Table 2).

Figure 2. Average Annual Pay for U.S., Phoenix, and Tucson Metropolitan Statistical Areas, 1980-90



Source: U.S. Department of Labor, Bureau of Labor Statistics, September 1991

In the early part of the '80s the state's mining industry lost nearly half of the 21,000 wage and salary jobs it started the decade with — primarily due to a drop in copper prices — before recovering about 13 percent of the job losses in the last few years. The mining losses, along with a decline of manufacturing jobs, particularly hurt the Tucson metropolitan area (Pima County), which has been unable to keep pace with wage gains of other MSAs (see Figure 2, and "Same Old Story: ... , p. 2).

Construction Strong in Early '80s

Arizona's construction sector was more than able to offset mining's losses in the early and middle part of the decade with a nearly 50 percent gain in wage and salary positions between 1980 and 1986. But overbuilt conditions and the subsequent savings and loan problems led to a retracement of most of construction's gains by the end of 1990.

Looking at these industry groups in another way: In 1980 Arizona's mining sector controlled 2.1 percent of non-farm payroll jobs in the state, compared to 1.1 percent for the nation. By the end of 1990 mining's share of wage and salary employment in Arizona had dropped to 0.8 percent, while the U.S. share declined to 0.7 percent. Meanwhile, the state's construction sector controlled 7.6 percent of wage and salary employment in 1980, but only 5.6 percent by 1990. The U.S. construction industry's share of wage and salary jobs only dropped from 4.8 percent in 1980 to 4.7 percent in 1990.

Another piece of the sub-par, wage-growth puzzle — at least in the last several years — has been the state's sluggish manufacturing sector and its growth in lower-paying industries.

On first glance Arizona's manufacturing sector appears to be the star performer of the decade — 20.1 percent growth between 1980 and 1990 versus a 5.8 percent decline for the nation. But upon closer scrutiny it's evident that the state's manufacturing's gains were not as powerful as they appear — in terms of an affect on wages — for three reasons: 1) because of where the gains occurred; 2) because of a steady loss of manufacturing jobs between 1985 and 1990, and at a faster clip than the rest of the country; and 3) because employment gains have been dwarfed by job gains in the lower-paying, service-producing industries.

First, quality of job gains is a major factor in determining an industry's affect on wages. Manufacturing's durable-goods sector (e.g., machinery, aircraft and missiles) tends to pay higher wages than its non-durable goods sector (e.g., food processing, apparel), and in Arizona between 1980 and 1990 non-durable goods industries grew nearly twice as fast as goods-producing industries, 31.6 percent vs. 16.7 percent.

Non-durable Goods Increased W&S Share

Although in total numbers the durable-goods sector gained more jobs than non-durable-goods sector in that time (20,000 versus 12,000), non-durable goods' share of Arizona's manufacturing employment increased from 22.5 percent to 24.7 percent. Nationally, durable-goods' share of manufacturing jobs increased from 40.1 percent to 41.8 percent during that period.

It's also important to note that Arizona's manufacturing job gains came early in the decade — when the state had wage gains closer to the national average — but between 1985 and 1990 the state's manufacturing wage and salary employment declined (-2.0 percent), and at a much faster rate than the rest of the nation (-0.7 percent). And interestingly job losses in manufacturing during those five years were due exclusively to the durable-goods sector (-2.9 percent), while the non-durable goods sector experienced most of its payroll-job gains for the decade during that period, 20.8 percent.

Table 3. Percentage Change of Non-farm Wage and Salary Employment In Selected Industries, Arizona vs. U.S., 1980-1990

	Arizona	U.S.
Wage and Salary	47.0%	21.6%
Goods-Producing	11.3	-2.7
Service-Producing	58.8	31.3
Manufacturing	20.1	-5.8
Durable Goods	16.7	-8.6
Non-durable Goods	31.6	-1.6
Construction	8.1	18.2
Mining	-41.0	-30.8
Services	95.5	57.9
Retail Trade	52.5	31.1

Source: U.S. Dept. of Labor, Bureau of Labor Statistics; and Arizona Dept. of Economic Security, Research Administration, 1980-1990

Finally, despite overall employment gains Arizona's manufacturing sector made the last decade, manufacturing's share of total payroll employment in Arizona during that period actually declined — from 15.2 percent to 12.4 percent — due to the phenomenal growth in the service-producing industries. Nationally, as might be expected, manufacturing's share of total payroll employment also declined — from 22.4 percent to 17.4 percent — but the U.S. manufacturing sector's share of total wage and salary employment was still much higher than Arizona's share.

Another major depressant on Arizona wages in recent years — and maybe the most significant in terms of future trends — has been the dramatic growth in part-time employment. As a general rule part-time workers (34 hours or less) make lower wages and receive fewer benefits than full-time workers, although the latter category is not part of the BLS annual wage survey.

Between 1985 and 1990 part-time employment in Arizona jumped 24.7 percent (56,000 jobs), compared to increases of only 7.0 percent nationally and 8 percent in fast-growing California, according to data from the Current Population Survey (CPS).[1] The CPS is a monthly survey of 60,000 U.S. households conducted by the Census Bureau for the U.S. Department of Labor's Bureau of Labor Statistics (BLS).

Despite strong full-time employment gains in Arizona during that time (17.3 percent versus 10.7 percent nationally), part-time workers' share of total employment in Arizona increased from 16.7 percent to 17.6 percent, while nationally part-time employment's share of total employment decreased from 17.4 percent to 16.9 percent. Total employment includes wage and salary workers, plus the self-employed, agricultural workers, unpaid family members, and domestic workers.

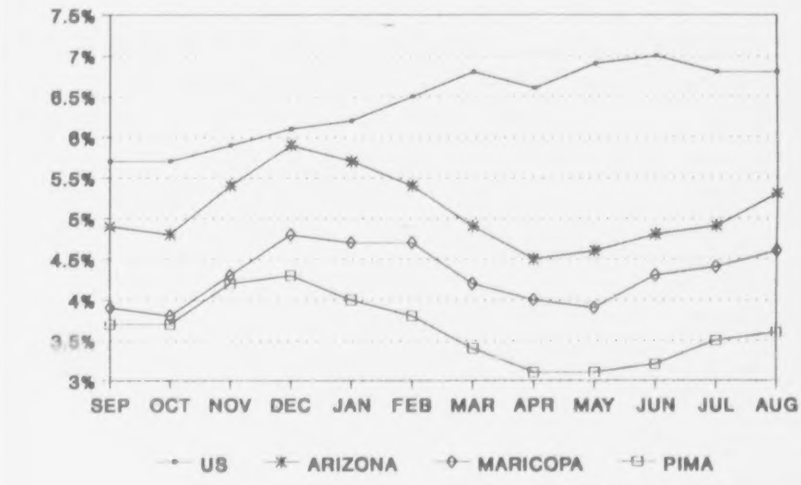
Although no specific industry data on part-time employment at the state level is available from the CPS data, as a general rule the lower-paying retail trade and service industries employ a large percentage of part-time employees. And over the last five years the major portion of the state's wage and salary employment growth has occurred in either retail trade (18.7 percent growth) and services (35.4 percent growth). In fact, without those two major industry groups Arizona's wage and salary job growth between 1985 and 1990 (16.7 percent) would have been negative.

While the jump in part-time workers in Arizona could be partially explained by a large increase in the number of people working two or more jobs, that doesn't appear to be the case. Somewhat surprisingly the state ranked 46th among all states in a May 1989 survey of multiple job-holders[2] by the CPS, with only 4.9 percent of Arizona workers reporting they worked two or more jobs simultaneously.

(Continued on page 12)

The Arizona Labor Force in September

Figure 1. U.S., Arizona, Maricopa County, and Pima County Unemployment Rates, September 1990-August 1991



Source: *U.S. Department of Labor, Bureau of Labor Statistics; and Arizona Department of Economic Security, Research Administration, June 1991*

Total unemployment in Arizona increased by 5,300 in August, helping push last month's seasonally adjusted unemployment rate up four-tenths of a percent to 5.3 percent. All of Arizona's counties, except Graham, also experienced higher unemployment rates in August, while nationally, total unemployment was little changed and the U.S. unemployment rate held steady at 6.8 percent.

The good news for Arizona was that non-farm payroll employment rose 7,100 last month with the government sector providing most of the gain. All but two of Arizona's major industry groups — transportation, communications, and public utilities (TCPU) and services — gained employment in August.

Employment losses in TCPU were not unexpected, as the much publicized layoffs at America West Airlines began in earnest. Typically, services employment declines in August due to tourism-related layoffs in the Phoenix and Tucson areas, and this year was no exception.

The government sector experienced a normal seasonal increase in August of 4,800 jobs. Seasonal employment declines occurred at the city and county level — as summer employment programs for youth came to an end — but were offset by gains in the school (6,000) and federal sectors. Arizona will see additional gains in school employment in September as teachers and support personnel continue to report back to work for the fall semester.

Trade posted the second largest gain in August among major industry groups, up 1,100 jobs. Retail trade had an increase of 1,600 jobs with most of the gain occurring within eating and drinking places and in the catch-all category of "other retail." Food stores was the only retail trade subindustry to lose employment in August.

Employment in Arizona's wholesale trade sector, meanwhile, declined 500 last month. Nationally, wholesale trade employment declined by 18,000 in August, and the sector has lost 165,000 jobs the past 12 months.

Manufacturing Posts Strong Gains

Surprisingly, the manufacturing sector had the third largest gain among Arizona's major industry groups in August, up 1,000 jobs. Unfortunately, gains occurred only in the non-durable goods sector. Durable goods manufacturing in Arizona continued its slide with most of the losses occurring in aircraft manufacturing.

Arizona's mining, construction, and FIRE (finance, insurance and real estate) industries each had job gains of 200 last month. The non-metropolitan counties (all counties except Pima and Maricopa) were most responsible for the increase in mining employment, while Maricopa County posted most of the increase in construction and FIRE employment.

Although up modestly in August, statewide construction employment is still down 4,500 over-the-year. Maricopa County is responsible for most of construction's over-the-year loss, down 4,800 positions, with the rural counties as a whole contributing an additional loss of 400. Pima County, however, has an over-the-year gain of 700.

Statewide, services employment was down 100 last month with losses in hotels and other lodging places and miscellaneous services offsetting gains in business services. While services showed little change in employment in August, the industry is up a healthy 14,600 jobs over-the-year.

As is the case nationally, Arizona's labor market continues to lack clear direction. Total unemployment declined in the first five months of the year, but has risen in the last three months. Non-farm payroll employment this year has been down in five months and up in three, but is still showing a 1.6 percent gain over August 1990 levels. However, if the last decade is any indication of the short-term outlook, then Arizona should see monthly increases in non-farm payroll employment through the end of 1991.

—Dennis Doby
RA Economist

Arizona Labor Force and Employment
August 1991 (in Thousands)

	ARIZONA					MARICOPA COUNTY					PIMA COUNTY				
				AMOUNT CHANGE					AMOUNT CHANGE					AMOUNT CHANGE	
	Aug.* 1991	July** 1991	Aug. 1990	July - Aug.	1990 - 1991	Aug.* 1991	July** 1991	Aug. 1990	July - Aug.	1990 - 1991	Aug.* 1991	July** 1991	Aug. 1990	July - Aug.	1990 - 1991
TOTAL CIVILIAN LABOR FORCE***	1708.0	1717.5	1726.3	-9.5	-18.3	1063.8	1074.6	1075.1	-10.8	-11.3	314.1	313.8	314.9	0.3	-0.8
Total Unemployment	99.5	94.2	101.0	5.3	-1.5	51.8	49.7	48.7	2.1	3.1	12.0	11.4	13.3	0.6	-1.3
Unemployment Rate	5.8%	5.5%	5.9%	—	—	4.9%	4.6%	4.5%	—	—	3.8%	3.6%	4.2%	—	—
Unemployment Rate (Sea. Adj.)****	5.3%	4.9%	5.4%	—	—	4.6%	4.4%	4.3%	—	—	3.6%	3.5%	4.1%	—	—
Total Employment	1608.5	1623.3	1625.3	-14.8	-16.8	1012.0	1024.9	1026.4	-12.9	-14.4	302.1	302.4	301.3	-0.3	0.8

Note: Above labor force statistics should not be used for economic-assistance programs

NON-AGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

	ARIZONA					MARICOPA COUNTY					PIMA COUNTY				
TOTAL WAGE AND SALARY	1489.9	1482.8	1465.9	7.1	24.0	980.7	979.4	970.3	1.3	10.4	255.2	252.4	249.1	2.8	6.1
Manufacturing	179.7	178.7	185.8	1.0	-6.1	133.5	132.6	138.2	0.9	-4.7	25.4	25.7	26.4	-0.3	-1.0
Durable Goods	133.5	133.8	140.0	-0.3	-6.5	101.1	101.3	105.8	-0.2	-4.7	19.6	19.9	20.7	-0.3	-1.1
Stone, Clay, and Glass	6.2	6.3	6.9	-0.1	-0.7	3.5	3.5	4.1	0.0	-0.6					
Primary and Fabricated Metals	14.1	14.1	14.2	0.0	-0.1	9.5	9.6	9.6	-0.1	-0.1					
Primary Metals	6.2	6.2	6.2	0.0	0.0										
Fabricated Metals	7.9	7.9	8.0	0.0	-0.1										
Machinery	57.0	57.0	59.6	0.0	-2.6	47.3	47.2	49.5	0.1	-2.2					
Aircraft and Missiles	24.9	25.3	27.5	-0.4	-2.6										
Lumber and Wood Products (Excluding Furniture)	6.5	6.4	6.7	0.1	-0.2										
Nondurable Goods	46.2	44.9	45.8	1.3	0.4	32.4	31.3	32.4	1.1	0.0	5.8	5.8	5.7	0.0	0.1
Food and Kindred Products	10.6	10.3	10.3	0.3	0.3	7.2	7.0	7.0	0.2	0.2					
Printing and Publishing	17.0	16.9	17.1	0.1	-0.1	11.8	11.7	12.1	0.1	-0.3					
Mining and Quarrying	13.4	13.2	12.7	0.2	0.7	0.7	0.7	0.8	0.0	-0.1	2.4	2.4	2.2	0.0	0.2
Copper Mining	10.7	10.5	10.0	0.2	0.7										
Construction	81.4	81.2	85.9	0.2	-4.5	52.8	52.6	57.6	0.2	-4.8	15.8	15.9	15.1	-0.1	0.7
Trans., Communications, & Public Utilities	81.8	82.1	81.7	-0.3	0.1	57.4	57.8	58.3	-0.4	-0.9	10.4	10.3	9.5	0.1	0.9
Transportation	47.2	47.5	45.4	-0.3	1.8	34.7	35.0	34.1	-0.3	0.6	5.9	5.8	4.9	0.1	1.0
Communications and Public Utilities	34.6	34.6	36.3	0.0	-1.7	22.7	22.8	24.2	-0.1	-1.5	4.5	4.5	4.6	0.0	-0.1
Trade	375.3	374.2	365.3	1.1	10.0	253.1	252.4	244.1	0.7	9.0	60.9	60.2	59.3	0.7	1.6
Wholesale Trade	75.8	76.3	74.1	-0.5	1.7	61.4	61.5	60.0	-0.1	1.4	7.5	7.5	7.4	0.0	0.1
Retail Trade	299.5	297.9	291.2	1.6	8.3	191.7	190.9	184.1	0.8	7.6	53.4	52.7	51.9	0.7	1.5
General Merchandise and Apparel	47.3	46.7	45.5	0.6	1.8	29.0	28.5	27.6	0.5	1.4	8.7	8.6	8.3	0.1	0.4
Food Stores	50.1	50.4	48.9	-0.3	1.2	32.1	32.0	30.6	0.1	1.5	8.7	8.8	8.6	-0.1	0.1
Automotive and Service Stations	35.4	35.4	35.1	0.0	0.3	22.2	22.2	21.8	0.0	0.4	5.6	5.7	5.7	-0.1	-0.1
Eating and Drinking Places	107.5	106.8	103.9	0.7	3.6	69.0	68.9	66.1	0.1	2.9	19.8	19.4	18.7	0.4	1.1
Finance, Insurance, and Real Estate	95.2	95.0	95.4	0.2	-0.2	76.0	75.9	76.2	0.1	-0.2	11.7	11.7	11.7	0.0	0.0
Services and Miscellaneous	419.7	419.8	405.2	-0.1	14.5	282.3	282.6	273.9	-0.3	8.4	77.7	77.6	73.7	0.1	4.0
Hotels and Lodging Places	42.2	42.6	42.2	-0.4	0.0	25.3	25.6	25.2	-0.3	0.1	6.1	6.2	6.0	-0.1	0.1
Business Services*****	82.2	81.8	79.4	0.4	2.8	65.4	65.2	63.9	0.2	1.5	11.8	11.7	11.1	0.1	0.7
Health Services	104.5	104.5	101.2	0.0	3.3	67.3	67.4	65.8	-0.1	1.5	23.1	22.9	21.7	0.2	1.4
Government	243.4	238.6	233.9	4.8	9.5	124.9	124.8	121.2	0.1	3.7	50.9	48.6	51.2	2.3	-0.3
Federal	45.7	44.7	46.9	1.0	-1.2										

* Preliminary
** Revised
*** Adjusted to the Current Population Survey to reflect place of residence

**** Normal seasonal variations have be limin l to reflect underlying economic trends
***** Business Services underwent a seri reak veen December 1987 and January 1988

Note: Annual averages may not total correctly due to rounding

Prepared by the Arizona Dept. of Economic Security, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Non-metropolitan Counties
Labor Force and Employment
August 1991

	Apache	Cochise	Coconino	Gila	Graham	Greenlee
CIVILIAN LABOR FORCE*	13,875	34,900	44,750	13,550	8,350	3,550
Total Unemployment	2,000	2,300	3,000	1,175	525	225
Rate	14.4%	6.6%	6.7%	8.7%	6.2%	6.4%
Rate (Seas. Adj.)**	12.0%	6.9%	6.2%	8.9%	5.7%	6.4%
Total Employment	11,875	32,600	41,750	12,375	7,825	3,325
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS						
TOTAL WAGE AND SALARY	14,900	25,275	42,225	11,900	5,300	3,500
Manufacturing	550	1,075	3,525	1,450	225	25
Mining & Quarrying	25	100	75	1,375	0	1,975
Construction	450	975	1,600	675	150	375
T.C.P.U.	1,900	1,700	2,625	550	125	50
Trade	1,500	5,025	10,550	2,450	1,575	300
F.I.R.E.	500	650	850	300	125	25
Services & Misc.	5,375	5,125	11,575	2,425	875	175
Government	4,600	10,625	11,425	2,675	2,225	575

	La Paz	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
CIVILIAN LABOR FORCE*	5,475	39,175	28,000	37,325	11,600	42,600	47,075
Total Unemployment	475	2,425	2,925	3,000	1,950	2,025	13,725
Rate	8.8%	6.2%	10.4%	8.0%	16.9%	4.8%	29.1%
Rate (Seas. Adj.)**	7.6%	6.2%	9.6%	7.3%	11.3%	5.0%	17.8%
Total Employment	5,000	36,750	25,075	34,325	9,650	40,575	33,350
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS							
TOTAL WAGE AND SALARY	3,975	28,075	22,025	29,325	10,425	29,575	27,475
Manufacturing	275	2,550	2,025	3,475	1,000	2,525	2,050
Mining & Quarrying	75	50	1,275	4,175	25	1,075	50
Construction	300	2,700	875	550	300	2,525	1,325
T.C.P.U.	150	1,375	1,575	1,150	725	1,075	1,025
Trade	1,300	8,325	4,425	5,325	4,550	8,050	8,025
F.I.R.E.	100	1,425	450	775	275	1,025	975
Services & Misc.	900	7,250	5,650	4,975	1,775	7,500	6,075
Government	875	4,400	5,750	8,900	1,775	5,800	7,950

* Adjusted to the Current Population Survey (CPS) to reflect place of residence.

** Seasonal adjustment not applicable for economic assistance programs.

T.C.P.U. = Transportation, Communications, and Public Utilities

F.I.R.E. = Finance, Insurance, and Real Estate

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Estimated Hours and Earnings of Production Workers in Selected Industries
Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Aug.* 1991	July** 1991	Aug. 1990	Aug.* 1991	July** 1991	Aug. 1990	Aug.* 1991	July** 1991	Aug. 1990
Manufacturing	$434.16	$432.15	$414.28	40.5	40.2	40.3	$10.72	$10.75	$10.28
Aircraft & Missiles	663.87	662.39	647.57	45.1	45.4	45.7	14.72	14.59	14.17
Food & Kindred Prod.	338.82	339.44	364.27	38.9	37.8	40.7	8.71	8.98	8.95
Primary Metals	522.70	495.46	504.06	40.9	39.7	37.2	12.78	12.48	13.55
Machinery	422.93	426.12	359.72	39.6	40.2	37.2	10.68	10.60	9.67
Copper Mining	648.56	648.61	583.44	44.0	42.7	42.9	14.74	15.19	13.60
Construction	442.38	451.20	452.35	37.3	37.6	37.2	11.86	12.00	12.16
Utilities	728.46	761.24	699.94	42.8	43.4	44.3	17.02	17.54	15.80
Retail Trade**	275.47	274.49	260.10	32.6	32.6	32.8	8.45	8.42	7.93
Wholesale Trade	408.05	409.55	381.31	38.1	37.3	38.4	10.71	10.98	9.93

Estimated Hours and Earnings of Production Workers in Selected Industries
Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Aug.* 1991	July** 1991	Aug. 1990	Aug.* 1991	July** 1991	Aug. 1990	Aug.* 1991	July** 1991	Aug. 1990
Manufacturing	$450.32	$454.40	$446.42	41.2	40.9	41.8	$10.93	$11.11	$10.68
Construction	464.84	477.88	458.30	37.7	38.2	36.9	12.33	12.51	12.42
Retail Trade**	292.71	283.47	273.39	33.8	33.0	33.3	8.66	8.59	8.21
Wholesale Trade	420.53	424.13	398.87	38.3	37.7	37.7	10.98	11.25	10.58

Estimated Hours and Earnings of Production Workers in Selected Industries
Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Aug.* 1991	July** 1991	Aug. 1990	Aug.* 1991	July** 1991	Aug. 1990	Aug.* 1991	July** 1991	Aug. 1990
Manufacturing	$414.32	$410.74	$353.60	39.8	39.8	37.3	$10.41	$10.32	$9.48
Construction	386.13	397.67	381.26	36.6	37.2	35.9	10.55	10.69	10.62
Utilities	632.59	641.24	650.16	41.4	41.0	43.0	15.28	15.64	15.12

* Preliminary.

** Revised

*** Excludes eating and drinking places.

Note: These estimates are based on a sample of full- and part-time production and related employees whose payroll and hours are reported for the pay period which includes the 12th of the month.

Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Arizona Labor Force and Employment for Economic Assistance Programs
August 1991

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,708,008	1,608,542	99,466	5.8%
Apache	13,874	11,871	2,003	14.4
Cochise	34,892	32,603	2,289	6.6
Coconino	44,746	41,753	2,993	6.7
Gila	13,551	12,370	1,181	8.7
Graham	8,339	7,826	513	6.2
Greenlee	3,542	3,317	225	6.4
La Paz	5,476	4,992	484	8.8
Maricopa	1,063,778	1,012,016	51,762	4.9
Mohave	39,170	36,749	2,421	6.2
Navajo	27,998	25,078	2,920	10.4
Pima	314,060	302,072	11,988	3.8
Pinal	37,321	34,326	2,995	8.0
Santa Cruz	11,594	9,638	1,956	16.9
Yavapai	42,599	40,575	2,024	4.8
Yuma	47,071	33,357	13,714	29.1

These figures are the only official BLS labor statistics to be used for revenue sharing purposes. They are not designed to be used as economic indicators.

NOTE: Series for Yuma and La Paz counties start January 1983.
Data are not comparable to any past series.

Wage Malaise

(Continued from page 6)

The survey, however, was subject to an error factor of plus or minus 1.4 percent, which means the state's percentage of multiple jobholders could have been closer to the U.S. average of 6.2 percent. But nevertheless, Arizona would not have had a higher-than-normal number of multiple jobholders.

In summary, there have been several factors at work the past decade that kept Arizona's wage gains well below the national average. Some of these, like the loss of construction and mining jobs, are cyclical with the state likely to receive an employment and pay boost from these areas during the 1990s (mining and construction payroll employment is up slightly in 1991). On the other hand, the fast growth in service-producing industries and part-time employment is likely to continue, along with a restraint on government employment, keeping downward pressure on Arizona wage gains.

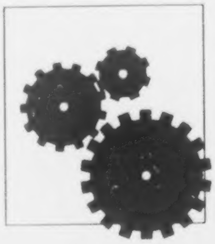
—Brent Fine
***Arizona LMI Newsletter* Editor**

Notes:

1. CPS' estimate of part-time employment for states was subject to sampling error. Arizona's part-time employment data for 1985 and 1990 were tested against BLS standards to ensure statistical significance at the 90 percent confidence level. Additional information about the CPS employment survey, including details about sampling error, can be found in BLS' *Geographic Profile of Employment and Unemployment*, Bulletin 2381.
2. BLS defines multiple jobholders as persons who are working two jobs at the same time. Individuals, such as teachers, who work at two different jobs during the year, but not at the same time, are not considered multiple-job holders by BLS.

Arizona Submits Proposal for Jet Plant Expected to Employ Up to 10,000 Workers

"New Developments" is featured each month as a service to our readers. This section is a compilation of public announcements and articles from newspapers and periodicals about events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of business news is not possible. In addition, the Arizona LMI Newsletter is not responsible for incorrect information reported by these sources.



MANUFACTURING — In early September, the state submitted a proposal to **McDonnell Douglas Corp.** to bring a **planned aircraft-manufacturing facility for its new MD-12X commercial airliner** to the East Valley. The $800 million aircraft plant is expected to employ about 10,000 workers. The state is reported to be offering hundreds of millions in incentives, as well as special training for workers through the Maricopa County Community College system. In addition, Arizona has proposed that land at the soon-to-be-vacant Williams Air Force Base in Mesa be used for the aircraft facility. McDonnell Douglas, which is looking at several sites across the country, is expected to make a decision early next year.

The **start-up in September** of a new Phoenix-area daily newspaper, *The Arizona Newsday*, has been **postponed at least until January**, according to a spokesperson for the paper's founder, former Gov. Evan Mecham. The major reason given for the delay is the uncompleted remodeling of a 165,000-square-foot building at 4636 N. 43rd Avenue in Glendale that will be used for the publication's production facility and offices. The newspaper was expected to employ up to 2,000 workers, according to earlier newspaper reports.

A lucrative deal between **International Business Machines and SGS-Thompson Microelectronics** will allow the latter to **keep its U.S. headquarters and 100 employees in Phoenix**. SGS-Thompson has agreed to make computer chips for IBM's new generation of graphics displays that will be used in its line of personal computers. In January, SGS-Thompson had announced it would close its Phoenix operation.

Automotive Parts Exchange, which rebuilds parts such as starters, alternators, and generators for foreign and domestic cars, **continues to expand its workforce since moving to Yuma** from Orange, Calif. About 300 people currently work in the Yuma plant, 10395 Avenue 4E, and the company expects to hire an additional 200 to 400 workers by April.

The **Prescott Planning and Zoning Commission has given its blessing to a planned 10 1/2-acre industrial park** that the city would develop, pending city council approval, into nine lots for light industry and manufacturing businesses. Several businesses, including a sporting-goods manufacturer, have expressed interest in the park, which would be located southwest of Wilkinson Drive at the city's airport, says a Prescott official.

Scottsdale-based **Edgcore Technology Inc.**, which manufactured high-speed microcomputers, **ceased to operate as of late August**. The eight-year-old company at one time had employed 150 people at its 46,000-square-foot manufacturing operation, but was down to less than 10 workers at the end. Motorola Inc. purchased the company's technology and hired the last of Edgcore's employees.

CONSTRUCTION — The proposed multi-million dollar **Square One project near Patriots Park in downtown Phoenix has been scrapped**. Withdrawal of financing by Citibank, the collapse of the Arizona real estate market, and the opening of the Arizona Center and The Mercado were cited as major reasons for the collapse of the 80,000-square-foot project, which was expected to offer several stories of retail shops and restaurants.

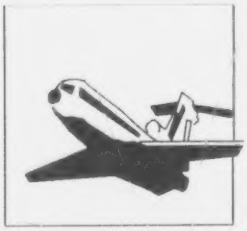
Site-preparation work for Southwest Airlines' $10 million maintenance facility at Sky Harbor International Airport was **set to begin in mid-September**. The 125,000-square-foot maintenance facility, which will service the airline's fleet of Boeing 737 aircraft, is scheduled to open next August and initially employ about 150 workers.

McCarthy, a St. Louis-based construction company, was set to begin work in September on a **$30 million expansion and renovation of St. Joseph's Hospital and Medical Center** in Phoenix. The majority of the work will be concentrated on remodeling of 300,000 square feet of space used for obstetrics, radiology, pediatrics, and other areas.

TRADE — The **merged drug-store chain of Revco and Super X was officially changed to RxPlus** in September. Revco and Super X were previously under Chapter 11 bankruptcy protection. RxPlus has 159 stores in four western states, including 100 in Arizona and 46 in the Valley, making it the state's largest drug-store chain. RxPlus, which has its headquarters in Phoenix and a warehouse in Glendale, employs about 1,750 people statewide.

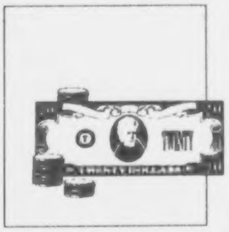
Sixteen additional retail stores and four restaurants are scheduled to open by the end of the year at the recently remodeled **Scottsdale Fashion Square shopping center** on Camelback Road. The new stores will give the retail complex a total of 120, an 80 percent occupancy rate. Meanwhile, Fashion Square's next-door neighbor, Dallas-based **Neiman Marcus**, is planning to open its first Arizona location in October at the CamelView Plaza.

California-based **RB Furniture Inc. is expected to close its five Arizona retail locations** by the end of the year. A downturn in the economy and high operating costs were cited as the major reasons for the shutdown of two stores in Phoenix and one each in Mesa, Scottsdale, and Tucson. No information on expected employment losses was made available.



TRANSPORTATION, COMMUNICATIONS AND PUBLIC UTILITIES — **Prescott may soon have a new airline and runway** for its airport if all goes according to plan. Prescott-based **Arizona Pacific Airways** plans to begin daily flights between Prescott and Phoenix starting in mid-October. The new airline is awaiting approval for a grant from the federal government, but has already raised $1 million in capital. Arizona Pacific, which expects to employ about 20 workers, may also expand its service to Laughlin, Nev., and Grand Canyon. Mesa Airlines of Farmington, N.M., also offers Phoenix-to-Prescott service. Meanwhile, the Federal Aviation Administration has offered $3 million to Prescott to design and construct a new parallel runway at the city's airport, Ernest A. Love Field. The grant would pay more than 90 percent of the cost. **The Prescott City Council was expected in September to decide whether to accept the funds and pay for the remaining cost as part of its 1991-92 budget.**

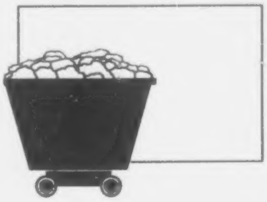
Colorado City opened a $1.4 million, dual-runway airport in September, and city officials expect that it will help spur economic development, particularly in the area of tourism. Colorado City is located near Zion and Bryce national parks in southern Utah and the north rim of the Grand Canyon. A 5,600-square-foot hanger is currently under construction with plans for a terminal down the line.



FINANCE, INSURANCE AND REAL ESTATE — **First Interstate Bancorp** of Los Angeles, parent company of First Interstate Bank of Arizona, plans to **lay off 3,500 workers**, about 10 percent of its workforce, in order to cut annual expenses by $250 million. First Interstate is expected to lose $200 million in the third quarter of 1991 alone. No details have been released on how the cutbacks will affect 4,900 Arizona employees.

SERVICES — The **Phoenix area is getting** its second professional football team, but this one will play indoors. Jerry Colangelo, president of the Phoenix Suns, headed a group of investors that put up $250,000 to acquire an **Arena Football franchise**, which will play beginning next May in the new America West Arena, currently under construction in downtown Phoenix. No details about employment — on the team or otherwise — have been disclosed.

Pending a favorable environmental-impact study and U.S. government approval, **Ohio developer William Keephler wants to build a $106 million ski resort in Williams** that would offer 19 ski runs and accommodate 3,000 skiers a day. Keephler, who owns 240 acres near the 30-acre Williams Ski Area, expects to attract skiers from southern California, as well as Arizona. The financially troubled Snowbowl ski resort near Flagstaff draws between 100,000 and 130,000 skiers a season.



MINING — Utah-based **Andalex Resources Inc. has decided not to build a coal-transfer station on a 128-acre site in Flagstaff**, which would have been a dropping-off point for shipment to the West Coast and Pacific Rim markets. The operation was expected to bring 150 truckloads of coal a day and several hundred well-paying jobs to the area, but residents fought the company's location because of traffic and environmental concerns. However, Flagstaff's loss may be a gain for towns in northern Arizona such as Fredonia, where trucks will pass through to deliver coal to a Moapa, Nev., transfer station. Andalex recently acquired the rights to mine 400 million tons of coal a year on the Kaiparowits Plateau in southern Utah, north of Lake Powell.

GOVERNMENT — Citing unreasonable government growth, **Pima County supervisors approved a plan to cut back county employment by 200 positions a year** for the next five years (see *Arizona LMI Newsletter*, September 1991). The planned elimination of 1,000 jobs (through attrition, retirement, and layoffs) are in addition to a reduction of 185 positions from the 1991-92 budget. Pima County currently employs about 5,300 workers, but has nearly 700 vacant positions, which should cut down on the number of layoffs, says Supervisor Greg Lunn, who authored the plan.

The **Pima Community College Board has approved a plan to**

build six additional campuses by the year 2015 and spend about $100 million for expansion of its three existing locations during the next five to 10 years. The proposed new campus locations are: East Speedway Boulevard and North Houghton Road; North Thornydale Road and West Lambert Lane; Interstate 19 at West Valencia; I-19 at Continental Road; I-19 at Sahuarita Road; and I-10 at Vail Road. Final approval for the plan is needed from the State Board of Directors for Community Colleges.

Plans to **build the world's largest telescope on top of Mount Graham in southeast Arizona were damaged** when Ohio State University decided to pull out of the project, leaving the University of Arizona and Italy's Arcetri Astrophysical Observatory $15 million short of the $60 million needed to build the 8.4-meter optical telescope. Work is continuing, however, on two other smaller telescopes that are joint ventures of UA, the Vatican, and Germany's Max Planck Institute. Controversy has surrounded all of the projects because of concern that they may disturb the endangered Mount Graham red squirrel and lead to its extinction.

The **National Weather Service** plans to build a **new office building in Flagstaff in 1994** as part of a nationwide effort to modernize and streamline its operations by the year 2000. The new building, expected to be at Flagstaff's Pulliam Airport, would accommodate up to 20 employees instead of the present five.

MISCELLANEOUS — The **Arizona Industrial Commission has fined the Phoenix-based Smitty's supermarket chain** nearly $12,000 for several violations of worker-safety and child-labor laws. Most of the worker-safety violations involved two areas: failing to require meat cutters to use wire-mesh gloves and having exposed edges on meat-cutting blades. The child-safety violations were for illegally allowing workers under 18 to operate a bailing machine used to crush and bundle cardboard boxes. Smitty's says it will appeal the glove infractions.

Holsum Bakery in Phoenix replaced 177 striking employees with permanent-replacement workers in September, after the union representing the bakery workers and the company could not reach an agreement on control of the workers' pension plan. Bakery workers went on strike in June after Holsum demanded that it take control of the workers' pension plan, but the union refused in negotiations to give up control of the plan. Holsum says it will only give jobs to striking employees who return to work when positions become available. The U.S. House of Representatives recently passed a bill banning the practice of permanently replacing striking workers, while the Senate will take up a measure early next year. President Bush is on record as opposing such legislation.

Arizona and California have signed a reciprocity agreement that will make it **easier for contractors to work in either state**. Under the agreement, both states will waive trade exam requirements and accept each others' licensing qualifications, but applicants will still have to pass business-management examinations. Arizona is also looking at signing reciprocity agreements with Utah and Nevada.

RA Staff Member Receives National Award

Dr. Hugo Soll, creator and manager of a computerized database of state labor market, occupational, and education information, the Arizona MICRO OIS, was recently honored as the top staff member of the national organization that oversees his work.

The National Occupational Information Coordinating Committee (NOICC), a federal interagency committee established by Congress to promote and coordinate occupational and employment data, named Soll its 1991 Outstanding SOICC staff member at its 14th annual convention in July. Since 1979, Soll has managed the Arizona MICRO OIS as a staff member of the Arizona State Occupational Information Coordinating Committee (ASOICC), which is part of the Department of Economic Security's Research Administration.

A MICRO OIS (Occupational Information System) combines multiple-source data into supply/demand clusters to help states meet the occupational information needs of vocational education, economic development, and employment and training planners. Two features of Arizona's MICRO OIS that were singled out for praise were a skills-transfer component and a module for developing individual vocational education plans for special-needs populations.

NOICC Executive Director Juliette N. Lester said in presenting the award: "Dr. Soll's outstanding efforts under the leadership of Stan Butterworth, executive director of the Arizona SOICC, have resulted in one of the most comprehensive Occupational Information Systems in the country."

Wholesale and retail trade industries, along with the services sector are where jobs are likely to be found in the Phoenix area during the fourth quarter, according to Manpower Inc., a national temporary-help company that conducts quarterly surveys of business-employment plans. Industry groups that will offer fewer job prospects: transportation and public utilities, and non-durable goods manufacturing.

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S0465-1A

ARIZONA LABOR MARKET INFORMATION NEWSLETTER

Vol. XV No. 11
November 1991

Unemployment Rate

Seasonally Adjusted
September*

ARIZONA	–	5.4%
Maricopa Co.	–	4.7
Pima Co.	–	3.5
United States	–	6.7

Consumer Price Index

U.S. – September 1991
Base = 1982-84

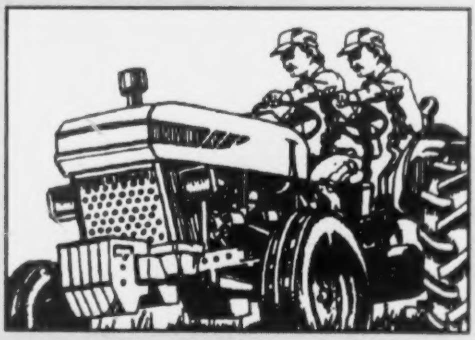
Wage Earner/Clerical Worker	–	135.2
% Chg. Year Ago	–	3.1
All Urban	–	137.2
% Chg. Year Ago	–	3.4

Phoenix – 3rd Qtr 1991
Base = 1982-84

All Urban	–	137.4
% Chg. Year Ago	–	2.7

Tucson CPI No Longer Available (see May 1991 *Arizona LMI Newsletter*)

* Preliminary



Doubling-Up

BLS Survey Shows No Change in Nation's Multiple-Jobholder Rate

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DES Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

No Change in Rate of 'Moonlighting,' BLS Survey Shows

Whether they were earning money to pay off credit-card bills or selling insurance out of their home, an estimated 7.2 million U.S. workers held two or more jobs in May of this year — about the same number as in May 1989 — the Labor Department's Bureau of Labor Statistics (BLS) reported in late October. Meanwhile, the nation's multiple-jobholding rate — the proportion of all employed persons with two or more jobs — was 6.2 percent in May, the same rate as in May 1989.

Estimated data on multiple jobholders for May was compiled from answers to supplementary questions in the Current Population Survey (CPS), a monthly survey of about 60,000 households that provides basic labor force and unemployment data for the nation.[1] It was the first time since May 1989 that questions on multiple jobholding were asked and the fourth time since 1980.[2]

For the purpose of the CPS survey, a multiple jobholder is defined as an employed person who, during the survey week: had a job as a wage or salary worker with two employers or more; was self-employed and also held a wage or salary job; or worked as an unpaid family worker but also had a secondary wage or salary job.[3]

The U.S. multiple-jobholding rate escalated rapidly during the 1980s, jumping from 4.9 percent in 1980 to 5.4 percent in 1985, to 6.2 percent in 1989. But with the U.S. economy entering a recession in July 1990 and total employment falling considerably since then, the lack of growth in dual jobholding from May 1989 to May 1991 is not surprising. During prior recessions, the incidence of "moonlighting" had either declined or remained about unchanged, as employment cutbacks make it harder to hold onto or obtain a second job.

Table 1. **U.S. Multiple-Jobholding Rates by Selected Characteristics, May, 1970-91[1,2]**

	Overall	Men	Women	White	Black[3]
1970	5.2%	7.0%	2.2%	5.3%	4.4%
1971	5.1	6.7	2.6	5.3	3.8
1972	4.6	6.0	2.4	4.8	3.7
1973	5.1	6.6	2.7	5.1	4.7
1974	4.5	5.8	2.6	4.6	3.8
1975	4.7	5.8	2.9	4.8	3.7
1976	4.5	5.8	2.6	4.7	2.8
1977	5.0	6.2	3.4	5.3	2.6
1978	4.8	5.8	3.3	5.0	3.1
1979	4.9	5.9	3.5	5.1	3.0
1980	4.9	5.8	3.8	5.1	3.2
1985	5.4	5.9	4.7	5.7	3.2
1989	6.2	6.4	5.9	6.5	4.3
1991	6.2	6.4	5.9	6.4	4.9

Notes:

1. Data for 1970-80 do not reflect 1980 census population controls. Comprehensive surveys of multiple jobholders were not conducted in 1981-84, 1986-88, and 1990.
2. Multiple jobholders as percent of all employed persons in specified group.
3. Data for years prior to 1977 refer to the "black-and-other-population" group.

Source: U.S. Department of Labor, Bureau of Labor Statistics, October 1991

Somewhat surprisingly, Arizona's recent fast growth in part-time employment (see *Arizona LMI Newsletter*, October 1991) — which makes up three-fourths of secondary jobs for multiple jobholders — did not translate into a higher multiple-jobholder rate in May than in May 1989. In fact, Arizona's rate declined and was the next-to-lowest multiple-jobholding rate for all states and Washington D.C. in May, at 3.9 percent, only ahead of Louisiana (3.2 percent). Arizona's multiple-jobholder rate also ranked low in May 1989, at 4.9 percent, ahead of only five other states.[4]

One possible explanation for the state's lower rate: As Arizona's economy slowed between May 1989 and May 1991, second jobs became more difficult to obtain. And, although the change could not shown to be statistically significant, published CPS data for 1989 and 1990 show much faster growth in the number of Arizonans who took part-time work involuntarily — because they were unable to find full-time jobs — than those voluntarily taking part-time jobs.[5,6]

This would indicate a sluggish state

MULTIPLE JOBHOLDERS

Table 2. **U.S. Multiple Jobholders and Multiple-Jobholder Rates by Age, Marital Status, and Industry, May 1991 (Numbers In Thousands)**

	Both Sexes		Men		Women	
Characteristic	**Number**	**Rate[1]**	**Number**	**Rate[1]**	**Number**	**Rate[1]**
Age						
Total, 16 Years and Over	7,183	6.2%	4,054	6.4%	3,129	5.9%
16 to 19 years	267	5.0	155	5.6	113	4.3
20 to 24 years	770	6.4	418	6.6	352	6.2
25 to 34 years	2,141	6.5	1,227	6.7	915	6.1
35 to 44 years	2,172	6.9	1,222	7.2	949	6.6
45 to 54 years	1,245	6.2	668	6.2	576	6.2
55 to 64 years	494	4.4	311	4.9	183	3.8
65 Years and Over	94	2.7	52	2.6	42	2.8
Marital Status						
Single	1,786	6.3%	947	6.0%	838	6.7%
Married, Spouse Present	4,259	6.0	2,747	6.7	1,512	5.0
Widowed, Divorced, or Separated	1,138	6.5	359	5.3	779	7.4
Industry						
Agriculture	179	5.2%	139	5.1%	41	5.6%
Non-agricultural Industries	7,003	6.2	3,915	6.4	3,088	5.9
Wage and Salary Workers	6,691	6.4	3,733	6.8	2,958	6.0
Mining	25	3.4	17	2.8	8	5.8
Construction	271	4.7	239	4.6	33	6.4
Manufacturing	1,044	5.2	798	5.9	245	3.8
Transportation and Public Utilities	487	6.2	356	6.4	131	5.6
Wholesale Trade	261	6.1	190	6.3	70	5.7
Retail Trade	914	5.3	444	5.3	470	5.3
Finance, Insurance, and Real Estate	414	5.9	187	6.5	227	5.4
Services	2,747	7.7	1,125	8.8	1,622	7.1
Public Administration	528	9.3	376	11.5	152	6.2
Self-employed Workers	306	3.5	182	3.2	123	4.0
Unpaid Family Workers	7	2.9	(2)	(2)	7	3.4

Notes:

1. Multiple jobholders as a percent of all employed persons in specified group.
2. Not available.

Source: U.S. Department of Labor, Bureau of Labor Statistics, October 1991 economy that forced many laid-off workers and recent entrants into the labor market who wanted full-time jobs to take part-time work, thus leaving fewer part-time jobs available for those wanting secondary work. (A more detailed look at part-time employment will follow in an upcoming *Arizona LMI Newsletter*.)

Caution should be used, however, when trying to analyze Arizona's multiple-jobholding rate because it was determined from only one month's worth of CPS data, CPS' survey sample for the state is relatively small (640 households), and seasonal factors due to the timing of the survey — in this case, the month of May — could also affect the significance of the data.

States with the highest multiple-jobholding rates tend to be in areas of the country that have a high percentage of agricultural jobs, according to one BLS official, because a large number of farmworkers take second jobs to make ends meet. States with the highest multiple-jobholding rates in May were: Wyoming (12.7 percent), South Dakota (11.6 percent), Montana (11.1 percent), and Minnesota and Idaho (both 10.0 percent). All of these states have above-average numbers of agricultural workers as a share of their total employment, compared to agricultural workers' share of national total employment.[7]

Following are some of the major findings on multiple jobholders from the May CPS survey:

- The number of women holding more than one job (3.1 million) and the female multiple-jobholding rate (5.9 percent) were unchanged from 1989. Over the past two decades, the number of women holding more than one job has increased nearly fivefold and the proportion of all multiple jobholders who were women has risen from 16 percent to 44 percent.

- The multiple-jobholding rate for men of 6.4 percent was unchanged from May 1989; from the early 1970s, until it increased in 1989, the rate had held at around 6 percent.

- Across age and sex groups the highest incidence of multiple jobholding continued to be among men and women 35 to 44 years of age — 7.2 percent and 6.6 percent, respectively.

- When looking at sex and marital status, married men were still the most likely to work at more than one job, while married women were somewhat less likely to do so than women without a spouse. Widowed, divorced, or separated women had a high rate of multiple jobholding, 7.4 percent.

- Workers whose primary jobs were in public administration and the services industry continued to have the highest multiple-jobholding rates, 9.3 and 7.7 percent, respectively. Among major occupational groups, workers whose primary jobs were in managerial and professional fields had the highest rate, 7.3 percent.

- More than 91 percent of persons who worked a second job did so in a nonagricultural industry. Of these, just over three-fourths were moonlighting as wage and salary workers; the remainder were self-employed.

- More than 72 percent of multiple jobholders combined one full-time and one part-time job; a little more than 23 percent worked at two part-time jobs; and nearly 4 1/2 percent had two full-time jobs. Women were much more likely than men (36 percent vs. 14 percent) to work two part-time jobs.

- About 40 percent of dual jobholders reported that they worked at more than one job in order to meet regular expenses or pay off debts, while about 16 percent indicated that they moonlighted because they enjoyed the work on the second job. One-fourth were about equally divided among those who wanted to save for the future, get experience or build up a business, and earn extra money to buy a specific item.

- About 2.7 million multiple jobholders (38 percent) reported that some of their second-job work was done at home, up from 2.3 million (32 percent) in May 1989, while 1.2 million (16 percent) this year said all of it was done at home, compared to 971,000 (13 percent) in 1989.

Additional information on multiple jobholding can be found in the article, "Multiple jobholding up sharply in the 1980's," in the July 1990 issue of the Monthly Labor Review

—U.S. Department of Labor, Bureau of Labor Statistics; and DES, Research Administration

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Notes:

1. The Current Population Survey (CPS) provides basic information on the status of the labor force population 16 years and over. The CPS is conducted monthly for the Bureau of Labor Statistics by the Bureau of the Census using a scientifically selected national sample of about 60,000 households (640 in Arizona) with coverage in all 50 states and the District of Columbia.

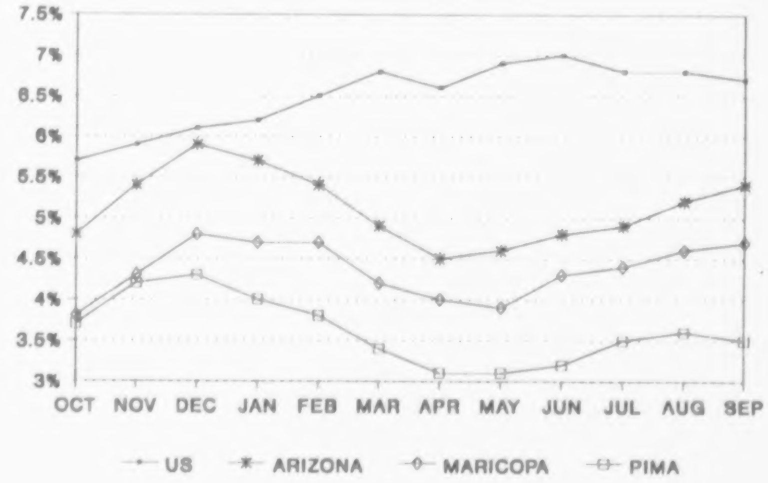
2. Data on multiple jobholding were collected annually each May prior 1980, but due to budget constraints since 1980 the data have been collected only three other times -- in May of 1985, 1989, and 1991.

3. A person employed only in private households (e.g., cleaner, gardener, baby-sitter) who worked for two or more employers during the survey week is not counted as a multiple jobholder; working for several employers is considered an inherent characteristic of private household work rather than as an indication of multiple jobholding. Also excluded from CPS estimates are self-employed persons with additional firms or businesses and persons with any additional jobs as unpaid family workers. The primary job is the one at which the greatest number of hours were worked.

(Continued on page 10)

The Arizona Labor Force in September

Figure 1. **U.S., Arizona, Maricopa County, and Pima County Unemployment Rates, October 1990-September 1991**



Source: U.S. Department of Labor, Bureau of Labor Statistics; and Arizona Department of Economic Security, Research Administration, October 1991

Weak seasonal employment gains (6,200) and a smaller-than-normal drop in the number of unemployed (4,300) caused the state's jobless rate in September to rise two-tenths of a percentage point, seasonally adjusted, to 5.4 percent. Unemployment in Arizona (and the nation) normally declines in September as students leave the labor force and return to school, while employment usually rises, principally because school staff return to work.

The state's two urban counties had diverging labor patterns in September with Maricopa County resembling the state and Pima County showing a more seasonal employment picture. Pima County's number of unemployed fell 400 while its employed rose 2,200, causing its seasonally adjusted unemployment rate to drop one-tenth of a point to 3.5 percent. In Maricopa County there was no change in unemployment while employment fell 2,400, resulting in the Phoenix metro-area's jobless rate rising one-tenth of point to 4.7 percent. Across the rest of the state unemployment rates rose in nine counties, declined in three, and remained the same in one.

While schools were the seasonal engine of September job growth, trade and services contributed seasonally as well. Total non-farm payroll jobs were up 30,900 from August with 28,600 coming from schools, 2,200 from trade, and 3,900 from services.

Over the year, total non-farm payroll employment has grown 22,400, a mere 1.5 percent September-to-September gain. And while August's similarly low annualized job growth of 1.6 percent ranked Arizona sixth in the nation, that was more a measure of how poorly the rest of the country was doing than how well-off was Arizona's economy.

Only automotive trade and lodging services showed any over-the-month strength statewide. Most notably, lodging services added 2,000 jobs in September while growth of 1,000 is normal for the month.

Manufacturing Shows Weakness

Arizona's manufacturing sector echoed the national experience in September, losing 400 jobs after posting gains in August. And, similar to the nation, most manufacturing losses came from machinery (-400) and aircraft and missiles (-300) businesses. Weak seasonal gains in non-durable goods manufacturing offset some of the losses. Last month, Arizona factory jobs were down 5,900 over-the-year, and were 11,400 below peak manufacturing employment levels in September 1988.

Steady construction employment levels was evidence of a healthier industry here than the country as a whole, which lost 6,000 construction jobs (seasonally adjusted) last month. Arizona loses 300 construction jobs on average in September. Nevertheless, Arizona construction remained down 3,900 jobs over-the-year and 36,000 jobs below peak employment in June 1986.

On a more positive note, construction employment was up 4,600, or 6.0 percent from the trough in February. Similarly, Maricopa County construction was up 3,400 jobs, or 6.9 percent from the trough in March. The seasonal trough-to-peak gain for Arizona's construction employment has averaged 5.1 percent over the last five years.

If the Federal Reserve's Open Market Committee continues to hold down interest rates, or lowers them more, there is hope for continuing recovery in Arizona's construction industry into 1992. Some seasonal decline can be expected during the fourth quarter of 1991.

Finance, insurance, and real estate (FIRE), a sector with some ties to the construction industry, did not do well in September. FIRE lost 500 jobs, most in the finance and insurance sectors. Perhaps that was to be expected given the public announcement of one failed major Arizona insurance firm.

Speaking of industries with failing companies, transportation lost 600 jobs last month, marking the first September loss in

(Continued on page 10)

Arizona Labor Forc

September 19

	ARIZONA				
				AMOUNT CHANGE	
	Sept.* 1991	Aug.** 1991	Sept. 1990	Aug. - Sept.	1990 - 1991
TOTAL CIVILIAN LABOR FORCE***	1709.5	1707.6	1742.8	1.9	-33.3
Total Unemployment	94.9	99.2	89.7	-4.3	5.2
Unemployment Rate	5.6%	5.8%	5.1%	—	—
Unemployment Rate (Sea. Adj.)****	5.4%	5.2%	4.9%	—	—
Total Employment	1614.6	1608.4	1653.1	6.2	-38.5

Note: **Above labor force statistics should not be used for economic-assistance programs**

NON-AGRICULTURAL WAGE AND SAL

TOTAL WAGE AND SALARY	1520.5	1489.6	1498.1	30.9	22.4
Manufacturing	179.3	179.7	185.2	-0.4	-5.9
Durable Goods	132.6	133.3	139.1	-0.7	-6.5
Stone, Clay, and Glass	6.2	6.2	6.9	0.0	-0.7
Primary and Fabricated Metals	13.9	14.0	14.1	-0.1	-0.2
Primary Metals	6.2	6.2	6.2	0.0	0.0
Fabricated Metals	7.7	7.8	7.9	-0.1	-0.2
Machinery	56.6	57.0	59.4	-0.4	-2.8
Aircraft and Missiles	24.6	24.9	27.3	-0.3	-2.7
Lumber and Wood Products (Excluding Furniture)	6.6	6.5	6.6	0.1	0.0
Nondurable Goods	46.7	46.4	46.1	0.3	0.6
Food and Kindred Products	11.0	10.9	10.4	0.1	0.6
Printing and Publishing	17.0	17.1	17.3	-0.1	-0.3
Mining and Quarrying	13.3	13.3	12.6	0.0	0.7
Copper Mining	10.7	10.7	9.9	0.0	0.8
Construction	81.3	81.3	85.2	0.0	-3.9
Trans., Communications, & Public Utilities	81.1	81.8	81.8	-0.7	-0.7
Transportation	46.6	47.2	45.8	-0.6	0.8
Communications and Public Utilities	34.5	34.6	36.0	-0.1	-1.5
Trade	377.5	375.3	367.3	2.2	10.2
Wholesale Trade	75.4	75.5	74.6	-0.1	0.8
Retail Trade	302.1	299.8	292.7	2.3	9.4
General Merchandise and Apparel	47.7	47.4	45.5	0.3	2.2
Food Stores	50.5	50.1	49.4	0.4	1.1
Automotive and Service Stations	35.5	35.4	35.1	0.1	0.4
Eating and Drinking Places	109.0	107.6	104.8	1.4	4.2
Finance, Insurance, and Real Estate	94.8	95.3	95.3	-0.5	-0.5
Services and Miscellaneous	423.9	420.0	407.6	3.9	16.3
Hotels and Lodging Places	44.3	42.3	42.6	2.0	1.7
Business Services*****	82.7	82.3	79.3	0.4	3.4
Health Services	104.6	104.7	101.4	-0.1	3.2
Government	269.3	242.9	263.1	26.4	6.2
Federal	45.8	45.9	46.4	-0.1	-0.6

* Preliminary

** Revised

*** Adjusted to the Current Population Survey to reflect place of residence

**** Normal seasonal variations have been el

***** Business Services underwent a series o

and Employment

Thousands)

MARICOPA COUNTY					PIMA COUNTY				
			AMOUNT CHANGE					AMOUNT CHANGE	
Sept.* 1991	Aug.** 1991	Sept. 1990	Aug. - Sept.	1990 - 1991	Sept.* 1991	Aug.** 1991	Sept. 1990	Aug. - Sept.	1990 - 1991
1061.1	1063.5	1080.8	-2.4	-19.7	316.8	315.0	318.5	1.8	-1.7
51.5	51.5	44.7	0.0	6.8	11.6	12.0	12.4	-0.4	-0.8
4.9%	4.8%	4.1%	—	—	3.7%	3.8%	3.9%	—	—
4.7%	4.6%	3.9%	—	—	3.5%	3.6%	3.7%	—	—
1009.6	1012.0	1036.1	-2.4	-26.5	305.2	303.0	306.1	2.2	-0.9

ARY EMPLOYMENT BY PLACE OF WORK

998.0	980.4	987.5	17.6	10.5	263.1	255.7	254.8	7.4	8.3
132.9	133.3	138.0	-0.4	-5.1	25.3	25.4	26.3	-0.1	-1.0
100.5	101.0	105.3	-0.5	-4.8	19.4	19.5	20.5	-0.1	-1.1
3.5	3.5	4.1	0.0	-0.6					
9.4	9.5	9.4	-0.1	0.0					
47.0	47.3	49.3	-0.3	-2.3					
32.4	32.3	32.7	0.1	-0.3	5.9	5.9	5.8	0.0	0.1
7.2	7.2	7.1	0.0	0.1					
11.8	11.9	12.2	-0.1	-0.4					
0.7	0.7	0.7	0.0	0.0	2.4	2.4	2.2	0.0	0.2
53.0	52.7	57.3	0.3	-4.3	15.5	15.8	15.1	-0.3	0.4
56.7	57.4	58.5	-0.7	-1.8	10.5	10.4	9.5	0.1	1.0
34.0	34.7	34.5	-0.7	-0.5	6.0	5.9	4.9	0.1	1.1
22.7	22.7	24.0	0.0	-1.3	4.5	4.5	4.6	0.0	-0.1
255.0	252.9	245.5	2.1	9.5	61.3	61.1	60.0	0.2	1.3
61.0	61.0	60.4	0.0	0.6	7.4	7.5	7.5	-0.1	-0.1
194.0	191.9	185.1	2.1	8.9	53.9	53.6	52.5	0.3	1.4
29.3	29.1	27.6	0.2	1.7	8.8	8.7	8.3	0.1	0.5
32.2	31.9	31.0	0.3	1.2	9.1	8.9	8.6	0.2	0.5
22.2	22.2	21.7	0.0	0.5	5.8	5.7	5.7	0.1	0.1
70.4	69.1	66.8	1.3	3.6	19.8	19.7	19.1	0.1	0.7
75.7	76.1	76.1	-0.4	-0.4	11.7	11.7	11.7	0.0	0.0
286.0	282.4	276.1	3.6	9.9	78.4	77.8	74.1	0.6	4.3
27.3	25.4	25.8	1.9	1.5	6.3	6.0	6.0	0.3	0.3
65.8	65.6	63.9	0.2	1.9	12.0	11.9	11.2	0.1	0.8
67.2	67.3	65.9	-0.1	1.3	23.1	23.1	21.8	0.0	1.3
138.0	124.9	135.3	13.1	2.7	58.0	51.1	55.9	6.9	2.1

m ied to reflect underlying economic trends
sa etween December 1987 and January 1988

Note: Annual averages may not total correctly due to rounding

Prepared by the Arizona Dept. of Economic Security, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Non-metropolitan Counties
Labor Force and Employment
September 1991

	Apache	Cochise	Coconino	Gila	Graham	Greenlee
CIVILIAN LABOR FORCE*	14,475	35,125	45,300	13,400	8,325	3,450
Total Unemployment	1,675	2,200	2,500	1,075	500	225
Rate	11.5%	6.3%	5.5%	8.1%	6.0%	6.5%
Rate (Seas. Adj.)**	13.3%	6.7%	6.4%	8.9%	6.1%	6.5%
Total Employment	12,800	32,925	42,800	12,325	7,825	3,225

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

	Apache	Cochise	Coconino	Gila	Graham	Greenlee
TOTAL WAGE AND SALARY	15,775	25,800	43,925	11,925	5,550	3,500
Manufacturing	550	1,300	3,525	1,475	250	25
Mining & Quarrying	25	100	75	1,375	0	1,975
Construction	500	1,000	1,575	600	175	375
T.C.P.U.	1,900	1,725	2,600	525	125	50
Trade	1,500	5,050	10,400	2,375	1,600	300
F.I.R.E.	475	650	850	300	125	25
Services & Misc.	5,400	5,075	11,625	2,450	900	175
Government	5,425	10,900	13,275	2,825	2,375	575

	La Paz	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
CIVILIAN LABOR FORCE*	5,425	38,325	26,750	37,500	11,575	42,250	49,700
Total Unemployment	450	2,350	2,350	3,025	2,000	2,000	11,500
Rate	8.2%	6.1%	8.7%	8.1%	17.3%	4.7%	23.1%
Rate (Seas. Adj.)**	7.8%	6.2%	10.5%	7.9%	12.8%	5.1%	19.0%
Total Employment	4,975	35,975	24,400	34,475	9,575	40,250	38,200

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

	La Paz	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
TOTAL WAGE AND SALARY	4,050	28,125	21,925	30,300	10,550	29,900	28,175
Manufacturing	275	2,575	2,000	3,550	1,000	2,475	2,175
Mining & Quarrying	75	50	1,225	4,150	25	1,075	50
Construction	300	2,700	850	475	325	2,475	1,425
T.C.P.U.	150	1,325	1,575	1,025	750	1,050	1,025
Trade	1,300	8,375	4,425	5,350	4,450	7,975	8,150
F.I.R.E.	100	1,400	450	775	275	1,025	1,000
Services & Misc.	900	7,150	5,325	5,025	1,825	7,575	6,125
Government	950	4,550	6,075	9,950	1,900	6,250	8,225

* Adjusted to the Current Population Survey (CPS) to reflect place of residence.

** Seasonal adjustment not applicable for economic assistance programs.

T.C.P.U. = Transportation, Communications, and Public Utilities

F.I.R.E. = Finance, Insurance, and Real Estate

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Estimated Hours and Earnings of Production Workers in Selected Industries
Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Sept.* 1991	Aug.** 1991	Sept. 1990	Sept.* 1991	Aug.** 1991	Sept. 1990	Sept.* 1991	Aug.** 1991	Sept. 1990
Manufacturing	$434.30	$438.34	$424.32	40.4	40.7	40.8	10.75	10.77	10.40
Aircraft & Missiles	657.90	669.20	662.09	45.0	45.4	46.3	14.62	14.74	14.30
Food & Kindred Prod.	327.73	338.91	359.10	37.8	39.0	39.9	8.67	8.69	9.00
Primary Metals	519.55	511.60	513.79	41.3	40.7	38.2	12.58	12.57	13.45
Machinery	432.40	432.52	376.27	40.0	39.9	38.2	10.81	10.84	9.85
Copper Mining	645.17	650.43	608.14	43.8	43.8	44.1	14.73	14.85	13.79
Construction	443.72	442.31	462.28	37.1	37.2	38.3	11.96	11.89	12.07
Utilities	734.51	738.26	739.38	41.9	42.6	45.5	17.53	17.33	16.25
Retail Trade**	280.99	273.90	262.60	32.7	32.3	32.5	8.59	8.48	8.08
Wholesale Trade	419.44	415.76	391.95	38.2	37.9	39.0	10.98	10.97	10.05

Estimated Hours and Earnings of Production Workers in Selected Industries
Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Sept.* 1991	Aug.** 1991	Sept. 1990	Sept.* 1991	Aug.** 1991	Sept. 1990	Sept.* 1991	Aug.** 1991	Sept. 1990
Manufacturing	$451.82	$456.91	$453.00	41.3	41.5	42.1	10.94	11.01	10.76
Construction	463.64	468.54	490.53	37.3	38.0	39.4	12.43	12.33	12.45
Retail Trade**	298.37	296.29	279.98	33.6	33.9	32.9	8.88	8.74	8.51
Wholesale Trade	433.90	429.34	412.06	38.5	38.3	38.8	11.27	11.21	10.62

Estimated Hours and Earnings of Production Workers in Selected Industries
Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Sept.* 1991	Aug.** 1991	Sept. 1990	Sept.* 1991	Aug.** 1991	Sept. 1990	Sept.* 1991	Aug.** 1991	Sept. 1990
Manufacturing	$417.44	$413.67	$359.95	40.1	39.7	37.3	10.41	10.42	9.65
Construction	391.46	388.36	407.73	37.0	36.5	37.1	10.58	10.64	10.99
Utilities	648.19	648.06	667.28	41.9	42.0	43.9	15.47	15.43	15.20

* Preliminary.

** Revised

*** Excludes eating and drinking places.

Note: These estimates are based on a sample of full- and part-time production and related employees whose payroll and hours are reported for the pay period which includes the 12th of the month.

Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Arizona Labor Force and Employment for Economic Assistance Programs
September 1991

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,709,518	1,614,605	94,913	5.6%
Apache	14,459	12,793	1,666	11.5
Cochise	35,132	32,928	2,204	6.3
Coconino	45,299	42,811	2,488	5.5
Gila	13,415	12,332	1,083	8.1
Graham	8,332	7,831	501	6.0
Greenlee	3,454	3,228	226	6.5
La Paz	5,421	4,979	442	8.2
Maricopa	1,061,134	1,009,614	51,520	4.9
Mohave	38,313	35,970	2,343	6.1
Navajo	26,740	24,402	2,338	8.7
Pima	316,752	305,186	11,566	3.7
Pinal	37,504	34,475	3,029	8.1
Santa Cruz	11,589	9,587	2,002	17.3
Yavapai	42,262	40,262	2,000	4.7
Yuma	49,712	38,207	11,505	23.1

These figures are the only official BLS labor statistics to be used for revenue sharingpurposes. They are not designed to be used as economic indicators.

NOTE: Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

Multiple Jobholders

(Continued from page 4)

4. Data from the CPS are subject to both sampling and non-sampling errors. The 1991 multiple-jobholding rate for Arizona was subject to an error factor of plus or minus .95 percent at the 90 percent confidence interval, which means there was a 90 percent chance that the state's rate would have been as high as 4.9 percent or as low as 2.9 percent. In either case, Arizona's rate would have been well below the national average of 6.2. The state's 1989 rate was subject to an error factor of plus or minus 1.4 percent at the 90 percent confidence interval, which means there was a 90 percent chance that the state's rate would have been as high as 6.3 percent or as low as percent 3.5 percent.

5. Since 1989, BLS has divided part-time employment for states into two categories — voluntary part-time and "part-time for economic reasons, usually part-time," or involuntary part-time. BLS publishes the data in its annual publication, *Geographic Profile of Employment and Unemployment.*

6. CPS' estimate of part-time employment is subject to sampling error. Arizona's involuntary and voluntary part-time employment data for 1989 and 1990 were tested against BLS standards for statistical significance at the 90 percent confidence level, and the change between the two year's data could not be shown to be statistically significant. Additional information about the CPS employment survey, including details on sampling error, can be found in the BLS publication, *Geographic Profile of Employment and Unemployment, 1990*, Bulletin 2381.

7. Agricultural shares of total employment are based on the annual average of 1990 CPS employment data, reported in the *Geographic Profile of Employment and Unemployment, 1990*, Bulletin 2381.

Labor Force

(Continued from page 5)

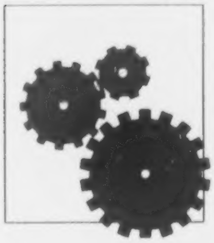
more than 10 years. Nevertheless, there were still 800 more people employed by transportation than in September a year ago. Not so, however, for the transportation, communications, and public utilities (TCPU) industry group as a whole, which was down 700 jobs both over-the-year and over-the-month.

In summary, Arizona's unemployment rate rose slightly in September, which resulted more from seasonal expectations of greater unemployment losses and employment gains than from actual job losses. In addition, job losses continued in TCPU last month and resumed in manufacturing and FIRE after one month of gains.

—Ron Simon,
RA Economic Analysis Manager

Garrett Engine, AT&T Announce Layoffs; States Loses Out on Apple Facility

"New Developments" is featured each month as a service to our readers. This section is a compilation of public announcements and articles from newspapers and periodicals about events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of business news is not possible. In addition, the Arizona LMI Newsletter is not responsible for incorrect information reported by these sources.



MANUFACTURING — A sluggish aircraft industry forced **Garrett Engine Division in Phoenix to lay off 200 employees**, primarily engineers, in late October with more cutbacks expected by the end of the year, says a company official. Garrett Engine, which manufactures equipment for a variety of aircraft, expects to see its employment drop to around 4,000 by year end, 400 below its July levels. Garrett Engine is a subsidiary of Allied-Signal Aerospace Co., which is undergoing restructuring that is expected to lead to a loss of 2,300 positions nationwide.

In late September, **Apple Computer Inc.** announced it chose Austin, Texas, over three other cities, including Phoenix, for a **customer-service operation** expected to employ around 500 workers. Arizona made a solid effort to land the Apple facility, but several factors hurt the state, said an article in *The Business Journal*, including a lack of Martin Luther King state holiday and a state-funded job-training program. No corporate income tax and an offer of 80 percent tax abatement helped Texas' cause, the article said.

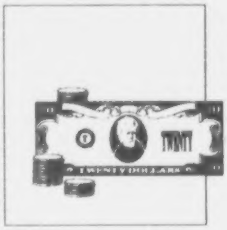
American Telephone and Telegraph Co. eliminated 124 non-management positions at its Phoenix cable-manufacturing plant in September because of slack demand for cable and wire products. The plant, which employed about 1,850 workers before the layoffs, hasn't had any cutbacks since 1989.

A north Phoenix plant that will make a device that regulates diesel truck-fuel consumption is expected to employ up to 50 workers. **Kinetic Technology** has set up a **16,000-square-foot plant near the Deer Valley Airport** to manufacture the Unison Fuel Control System, which in tests has shown to save up to 23 percent in fuel consumption. The facility was expected to open by the end of October.

MiNT Corp., a Tucson manufacturer of electronic and electromechanical products, expects to **continue hiring through the second quarter of 1992** for work on an $8.5 million marine navigational radar/anti-collision warning system used by small- and medium-sized fishing and pleasure boats.

NEW DEVELOPMENTS

Due to defense cutbacks and thus fewer federal contracts, **Loral Defense Systems' facility in Litchfield Park**, 20 miles west of Phoenix, has **reduced it workforce from 1,600 to 500 in the last four years**. However, Loral expects its workforce will stabilize in 1992 and possibly increase slightly because the New York-based company is optimistic about landing several major contracts involving its specialty of radar technology.



FINANCE, INSURANCE AND REAL ESTATE — **Valley National Bank** announced in mid-October plans to **eliminate 300 positions**, 4.6 percent of its workforce, by year-end, expected to save $8 million annually and improve productivity ratios. The Phoenix-based bank is offering severance packages to some who lose their jobs — either voluntarily or through forced cutbacks — and pay through December 31 to all who are laid off. Despite the cutbacks, Valley National is planning to open four new branches in the near future — one each in Nogales, Scottsdale, Chandler, and Mesa.

SERVICES — Pennsylvania-based **Continental Medical Systems Inc.** is expected to **create around 300 jobs** in Arizona by the end of next year with the opening of two medical-rehabilitation facilities, one in Chandler and the other in Tucson. Continental is planning to build a 56,000-square-foot, $10 million building on six acres in Chandler and already is constructing a similar-size facility on the campus of Northwest Hospital in Tucson. Each will employ between 140 and 160 people in a variety of occupations.

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ARIZONA LABOR MARKET INFORMATION NEWSLETTER

Vol. XV No. 12
December 1991

Unemployment Rate

Seasonally Adjusted
October 1991*

ARIZONA	–	6.1%
Maricopa Co.	–	5.3
Pima Co.	–	4.2
United States	–	6.8

Consumer Price Index

U.S. – October 1991
Base = 1982-84

Wage Earner/Clerical Worker	–	135.4
% Chg. Year Ago	–	2.7
All Urban	–	137.4
% Chg. Year Ago	–	2.9

Phoenix – 3rd Qtr 1991
Base = 1982-84

All Urban	–	137.4
% Chg. Year Ago	–	2.7

Tucson CPI No Longer Available (see May 1991 *Arizona LMI Newsletter*)

* Preliminary

California Exodus

Lower Costs, Less Regulation Helping Attract Jobs From Los Angeles Area, Report Says

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Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

Report: Neighbors Successfully Mining Jobs in S. California

"There's gold in them, there hills." Following a cry made famous in movies about the California gold-rush days, economic-development groups in Arizona, Nevada, and Mexico have been instrumental in recent years in helping pluck more than a few nuggets from Southern California's wealthy industrial base.

That's according to a report released in November by a California utility company, Southern California Edison (SCE). The report, "Business Climate in Southern California, Southern California Edison's Perspective," says that out of 500 plants constructed in Arizona, Nevada, and Mexico in the past five years, at least 160 — with employment of nearly 22,000 — were built by companies that left Southern California. Of those new facilities, 23 (all in manufacturing) involved relocations to Arizona, accounting for more than 7,500 new jobs (see Figure 1).

In addition, as of the end of September at least 74 more companies with more than 16,000 jobs in SCE's service area — which includes Los Angeles, Orange, San Bernardino, and Riverside counties, but not the city of Los Angeles — were considering moving out of, or already had left, Southern California, the report says. This figure may be low, however, because it only includes companies willing to discuss their plans. "The total number of companies considering leaving the region, or have already left, is no doubt higher," the report says.

Industries in Southern California most frequently targeted by economic developers, the report says, are: printing and publishing, electronics, food products, industrial machinery, transportation equipment, instruments (machine), rubber and plastics, and fabricated metals. All but transportation equipment, which involves wholesale distribution of equipment and supplies, are in the manufacturing sector.

Table 1. Major Reasons Given by Companies for Leaving Southern California

- **Quality of Life** — transportation, housing cost, quality of schools, environmental quality
- **Internal Business Factors** — company acquisition/divestiture/consolidation, market access and penetration, product requirements, management preference
- **Cost of Doing Business** — occupancy cost, labor cost, labor quality, environmental compliance cost
- **Government Compliance** — environmental compliance, local/state government problems

Source: Southern California Edison, November 1991

The report looked at reasons why companies left Southern California for Arizona, Nevada, and Mexico, and grouped them into four categories. Not surprisingly, about two-thirds of the responses fell into the category "cost of doing business," followed by "internal business factors," "government compliance," and "quality of life" (see Table 1).

The distributional patterns of the categories were similar across the three geographic areas SCE surveyed with one major distinction. While about one-fifth of the companies that moved to Nevada gave reasons that fit into the "quality of life" category, a much smaller percentage (less than 5 percent) of companies moving to Arizona and Mexico responded in that fashion. The likely difference, the report says, is that companies that moved to Nevada were generally smaller. "When a

Statewide Group Sets Priority Areas to Foster Growth

At a town hall meeting in Scottsdale in mid-November, more than 200 business, education, and civic leaders from around the state adopted a blueprint for strategic economic development in Arizona. The forum was part of a project called ASPED (Arizona Strategic Planning for Economic Development), which was put together by a public-private partnership in 1990 to study the state's business and workplace infrastructure and develop a plan to foster economic growth.

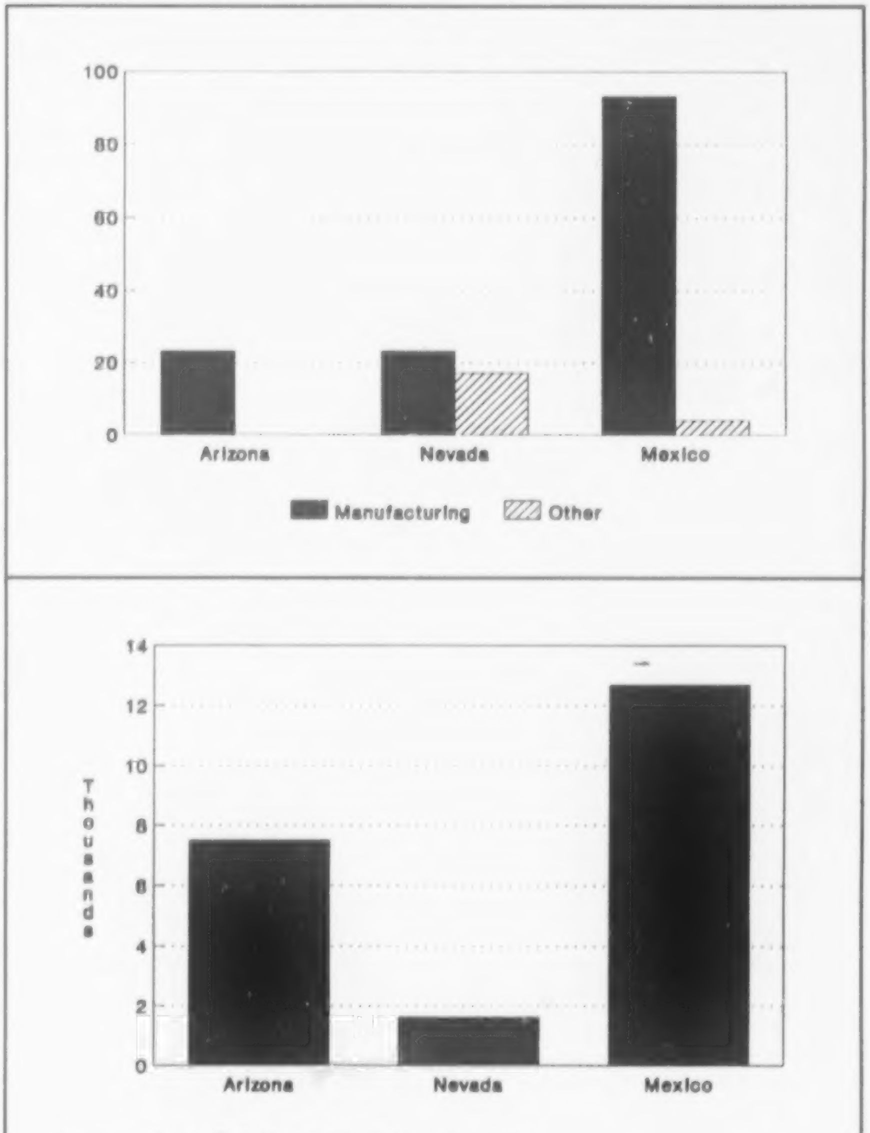
Attendees at the planning session helped pare down 97 proposals developed over the past two years by 20 committees of various industry and business groups and research organizations. The project has been overseen by the consulting firm of SRI International of Menlo Park, Calif.

A total of 19 priority areas were selected and those proposals were forwarded to the Governor's Commission on Economic Development, which will use the recommendations to draft bills for the 1992 legislative session. Among the major proposals were:

- reforming tax laws to stimulate economic development and investment, and simplifying tax laws and broadening the tax base to lessen the burden on business.
- creating a statewide job-training program aimed at improving

(Continued on page 4)

Figure 1. **Number of Companies (Top) and Respective Jobs (Bottom) Tracked to Arizona, Nevada, and Mexico from Southern California, 1987-1991**



Source: Southern California Edison, November 1991

small group of people runs a company, decision-makers are likely to emphasize quality-of-life issues if they are moving as well," the report says.

An official with the Arizona Economic Council, a public-private partnership that recruits new business to the state, says it's not surprising "quality of life" issues were not high on the list of companies' reasons for moving to Arizona, given most of the 23 companies involved were in "basic manufacturing" industries. When jobs paying between $6 and $10 an hour are involved and most of the workers are hired locally, "cost of doing business" is usually the major reason for moving, says the Council's David Krietor, economic-development executive officer for the city of Phoenix.[2]

Quality-of-life issues, Krietor says, normally play a bigger role when it involves a high value-added product (e.g., computers, aerospace) that requires a good percentage of technical jobs and hiring from out of state. The advantage Arizona has, he says, is that the state offers the type of workforce and quality-of-life features that allow it to compete for a "broad-range of facilities that are first-tier (high value-added) and second-tier projects."

Although a good percentage of the manufacturing jobs that left Southern California in the last five years were in the second-tier category, the stakes may be increasing. According to the report, economic developers are beginning to target a greater percentage of high-end companies in Southern California. "Downsizing in the aerospace industry, coupled with high operating costs and regulatory burdens, are driving high value-added industries out as well," the report says. The average salary of aerospace workers in Southern California is around $42,000 a year, the report says.

Up until now, economic developers have had little success in luring Southern California's high-end companies to the state, says Keith Watkins, a corporate accounts representative with the Greater Phoenix Economic Council, which recruits businesses for the Maricopa County area. Watkins says a few small companies (around 100 employees) involved in the high-tech field have moved into the state, primarily because of related companies already here (e.g., Intel, Motorola).

The SCE report also says California companies are "aggressively recruited" by out-of-state economic developers, pointing out that a number of out-of-state companies and organizations — including more than a half-dozen in Arizona — have been involved in extensive recruitment of Southern California companies. It lists the

Statewide Forum

(Continued from page 2)

workers' skills in industries where the state is trying to foster growth (see, "Strategic Plan Targets ... ," p. 5).

- improving math and science skills of students in kindergarten through 12th grade.
- making available money for small businesses through the use of tax breaks and other incentives to encourage private investments in entrepreneurial ventures.
- upgrading of airline service and facilities in the state.
- developing a statewide marketing plan to promote Arizona tourism, and setting up of trade, tourism, and investment offices in Mexico, Japan, and Europe.
- streamlining and simplifying the state's regulatory process, and reviewing the impact of environmental laws on business with an eye toward eliminating unneeded laws and regulations.
- encouraging the development of minority and small-business development.

The strategic planning process was the culmination of the second of three phases for ASPED. The first phase, called Strategic Assessment, began in November 1990 and included: analysis of Arizona's economic strengths and weaknesses; identification of the state's competing, complementary, and interdependent industry groups (clusters); and the determination of Arizona's "economic foundations" (e.g., workforce skills, availability of capital) which support the development of cluster groups.

The first stage ended last spring with SRI International's release of a report called "Arizona At The Crossroads — Strategic Assessment." In that report, SRI pointed out that while Arizona has been one of the leading states in employment growth over the past two decades, much of the growth in the recent past has been in low-paying industries, which has hurt Arizonan's overall standard of living. In addition, the study said the state's economy during the 1980s had relied too heavily on in-migration and tax-induced construction projects, making the state's economy and revenue-generating capabilities vulnerable during economic downturns.

The report suggested that Arizona needs to concentrate on developing nine core industries, or cluster groups (e.g., optics, aerospace, tourism; see *Arizona LMI Newsletter*, June 1991), increase its productivity (e.g., through improving worker skills, better utilization of technologies), and restructure its tax system to avoid overreliance on recession-sensitive revenues (e.g., sales tax).

Following up on the report, the second phase, Strategic Planning Process, began last spring with the purpose to identify goals, set priorities, and develop directions for a strategic economic plan. A three-pronged approach was conducted to accomplish this process and obtain areas of consensus: 1) officials from each cluster group discussed their needs and objectives; 2) officials involved in economic-foundation areas considered the needs of the cluster groups; and 3) regional town halls and forums were held around the state to get the public's input.

The results of the groups' findings were published in a report called "Arizona Strategic Plan for Economic Development," a draft of which was released at November's forum. From this report, discussions were held and final recommendations were made.

ASPED's final stage, appropriately called Implementation, will get under way next February with the drafting and submittal of legislation by the Governor's Commission on Economic Development. Recommendations from the ASPED forum, along with the commission's own ideas, will be used to form a consensus to draft economic-development bills.

—DES, Research Administration

Greater Phoenix Economic Council as one of six economic-development organizations across the country with a permanent office in Southern California.

Watkins agrees with the report's assessment, saying his agency is "leaving no stone unturned" in trying to bring jobs to the Phoenix area. Adding to that, however, Krietor says in many cases companies have already thought about relocating and are coming into economic-development offices unsolicited to obtain information about the state. "Companies want to leave and we are trying to make it as easy as possible," Krietor says.

"We're focusing our greatest efforts in Southern California," says Mark Bare, a special projects coordinator for the state's Commerce Department. Bare says Arizona, along with Colorado, New Mexico, and Nevada are "sitting in a good spot, picking up a lot of the overflow" — from small companies being squeezed by costs to those that want to expand, but not in California. Besides offering lower operating costs, Bare says advantages Colorado and Nevada have over California are a lack of a corporate tax, while

Strategic Plan Targets Five Major Areas for Improving Workforce

The report "Arizona Strategic Plan for Economic Development," a draft of which was released in November, spells out five major areas where the state should focus its efforts to improve the quality of Arizona's workforce. These changes are expected to not only help attract higher quality and better paying jobs from out-of-state companies, but improve the skill level of workers for the state's existing and expanding companies.

The first proposal calls for the creation of statewide workforce-development policy that would plan for the lifelong learning needs of the state's residents. The study suggests that a statewide participatory process — similar to the public-private coalition used for ASPED — be used for assessment, goal-setting, and strategy development to provide "improvement at every educational level" and avoid "marginal reforms." In addition, this initiative recommends the creation of a state clearinghouse on workforce issues and a public-private innovation fund to finance prototypes for change.

The second proposal for improving workforce quality calls for public-private, job-training partnerships that would underwrite employee training and retraining efforts for new and expanding companies within specified cluster (industry) groups. The training program, considered essential for attracting higher-paying, out-of-state companies, would be provided primarily by the state's community colleges.

Workforce Proposals

- ✓ Creation of statewide workforce-development policy
- ✓ Public-private, job-training partnerships
- ✓ Broadening access to education and training
- ✓ Developing a coordinated early childhood-development system
- ✓ Strategy to take advantage of state's ethnic diversity

As it is proposed in the draft report, this initiative differs somewhat from a training bill that was turned down in the 1991 legislative session (see *Arizona LMI Newsletter*, August 1991) First, this plan would use public and private money to fund training and, second, it focuses specifically on helping companies in the nine cluster groups (e.g., aerospace, optics) the state is targeting. The 1991 legislation would have provided training funds for companies across all industries and been funded primarily through taxes on business. The reason for the change, says one ASPED official, is to avoid spending money on attracting companies that pay relatively low wages and focus on developing cluster areas. In addition, training "is not just for attracting new business, but for retention and expansion (of existing companies)," says Ted Kraver, chairman of the Human Resource Foundation panel that studied workforce-training issues.

The remaining three proposals focus on upgrading and improving access to the state's educational and social-services system. The trio of initiatives are concerned with ensuring that residents start receiving proper training on the front end (early in life), so that less attention is needed on the back end (after leaving or dropping out of school) when it's harder to facilitate skill upgrading.

One proposal calls for broadening access to education and training by tailoring programs to individual needs, expanding services, and using telecommunication and other technologies to improve service delivery. Two examples would be to open up training programs currently offered by large companies to employees of small business, and to use satellite technology for training (through media such as television) to reach individuals who otherwise would be unable to obtain specialized training.

A fourth initiative would develop a coordinated early childhood-development system to "replace the current fragmented

(Continued on page 12)

Arizona has the advantage of no franchise tax and its proximity to the West Coast.

Notes:

1. Moving out of Southern California does not always mean leaving that state; it could also mean moving to central or northern California.
2. While "labor cost" was one of only several reasons included in the "cost of doing business" category, it was likely one of the largest factors, although the report does not break down the distribution of reasons within categories. The report does not discuss the average wage of jobs that left Southern California, but in the industry groups listed, wages are generally about 15 to 20 percent lower in Arizona and Nevada than in Southern California. Also, high workers' compensation costs, due to stress-related injuries, is another major cost cited by companies wanting to leave Southern California, says Dave Krietor of the Arizona Economic Council.

—Brent Fine,
Arizona LMI Newsletter Editor

NEW DEVELOPMENTS

UI Benefits Extended; Eligible Arizonans to Receive Up to 13 Additional Weeks

Following are brief stories relating to labor issues affecting the nation and Arizona.

President Bush and Congress agreed in mid-November on a plan to extend unemployment benefits for the nation's long-term jobless. The legislation could give nearly 3 million Americans who exhaust their benefits between March 1, 1991 and June 13, 1992, up to 13 or 20 extra weeks of unemployment benefits beyond the normal maximum 26 weeks of coverage.

According to one source, an agreement was struck on the legislation, expected to cost about $5.3 billion, when differences were ironed out over stepped-up collections of student loans, which will be used to help pay for the measure. The agreement ended a four-month stalemate between Bush and Congress in which two earlier pieces of legislation were vetoed by the President because they were considered too costly and would "bust" a budget agreement worked out a couple of years ago.

States with an average unadjusted employment rate of 9 percent or higher for the most recent six-month period for which data are published, or an adjusted insured unemployment rate of 5 percent or higher for the last 13 weeks qualify for an additional 20 weeks of unemployment benefits. Any state that doesn't meet either standard are eligible for an additional 13 weeks. Between now and next June 13, however, states can move to the higher or lower level of benefits, depending on their two rates.

In Arizona, covered unemployed individuals are currently eligible for an additional 13 weeks of benefits. The current maximum unemployment insurance benefit in Arizona is $175 a week; it will rise to $185 a week in July 1992.

Pilot Programs to Aid Unemployed Young Adults

The U.S. Labor and Health and Human Services departments have announced plans to jointly fund 15 pilot programs to help underemployed young adults find and retain unsubsidized, permanent jobs. Using grants totaling nearly $11 million, the demonstration projects over the next three to five years will integrate health, education, and employment services to primarily aid "at-risk" young workers.

Six grants will support demonstration projects that use co-workers and volunteers to help young people with moderate and severe disabilities make the transition from school or supported-work environments into unsubsidized jobs. Three other projects will aid youth who have criminal records or are in custody of the courts make the transition to independent living. And three other grants will try to improve educational, training, and employment opportunities for youth in high poverty and crime areas. None of the pilot programs are in Arizona.

'Labor Surplus Areas' for FY 91-92 Announced

The U.S. Labor Department (DOL) has designated 12 civil jurisdictions in Arizona as "labor surplus areas" for federal fiscal year 1991-92, which runs from Oct. 1, 1991, through Sept. 30, 1992. The labor surplus status helps areas of high unemployment by making it easier for them to receive federal procurement dollars. Employers in these areas are eligible for preference in bidding on designated federal contracts.

In FY 1991-92, civil jurisdictions with an average unemployment rate of 6.6 percent or higher for the period from January 1989 through December 1990. The qualifying unemployment rate for FY 1990-91 was also 6.6 percent. Additionally, during the fiscal year DOL can classify jurisdictions as labor surplus areas due to "exceptional circumstances" — plant closures, contract cancellations, natural disasters, and other unforeseen problems. Areas are added on a monthly basis.

Labor Surplus Areas	Civil Jurisdictions Included
Apache Co.	Apache Co.
Balance of Coconino Co.	Coconino Co. less Flagstaff City
Gila Co.	Gila Co.
Graham Co.	Graham Co.
Greenlee Co.	Greenlee Co.
La Paz Co.	La Paz Co.
Navajo Co.	Navajo Co.
Pinal Co.	Pinal Co.
Santa Cruz Co.	Santa Cruz Co.
Sierra Vista City	Sierra City less Cochise Co.
Yuma City	Yuma City in Yuma Co.
Balance of Yuma Co.	Yuma Co. less Yuma City

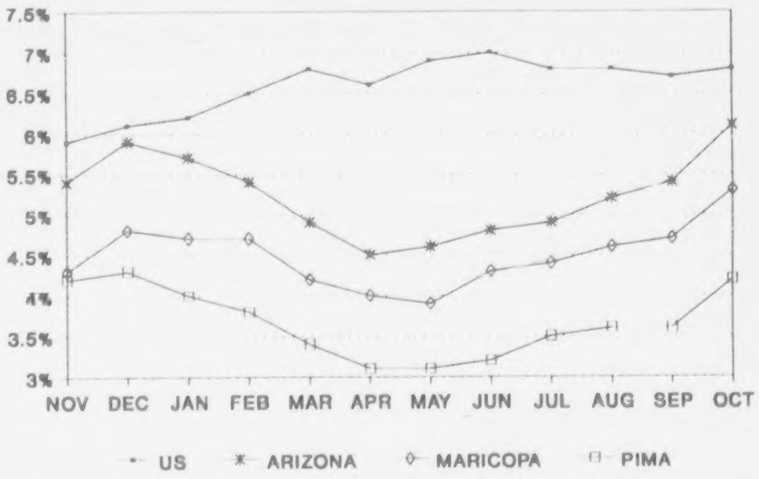
A complete listing of surplus areas, including updates, and general information on the program are available in *Area Trends in Employment and Unemployment*, published monthly by DOL's Employment and Training Administration. Cost is $24 for a year subscription and $3 for a single issue. To order, write: Superintendent of Documents, U.S. Government Printing Office, Washington D.C.; or call: (202) 783-3238.

Looking for a Job? 'Go West' Young Person

With few exceptions, the top 25 states for growth in wage and salary jobs for the year ending in September were located west of the Mississippi River. Nebraska led all states for that period with 5.3 percent growth, followed by South Dakota (3.1 percent), Utah (3.0 percent), Arkansas (2.8 percent), and North Dakota (2.4 percent). Arizona, with 1.5 percent growth, was in eighth place. West Virginia and Kentucky were the only states east of the Mississippi to crack the top 25, and they were far down the list in 18th and 21st place, respectively. In fact, the bottom 15 states for wage and salary growth were all from the eastern-half of the country with most located in the Northeast. Horace Greeley must have been an economist.

The Arizona Labor Force in October

Figure 1. U.S., Arizona, Maricopa County, and Pima County Unemployment Rates, November 1990-October 1991



Source: *U.S. Department of Labor, Bureau of Labor Statistics; and Arizona Department of Economic Security, Research Administration, November 1991*

The effects of the national recession began catching up with Arizona in October. Total unemployment in the state grew by 8,100 during the month, helping push up the state's seasonally adjusted unemployment rate seven-tenths of a percentage percent to 6.1 percent. Nationally, an increase of 140,000 in total unemployment caused the U.S. unemployment rate to edge up one-tenth of a percentage point to 6.8 percent.

As might be expected, the state's two major metropolitan areas, which control 80 percent of Arizona's employment, also experienced sharp increases in their jobless rates in October. Maricopa County's rate jumped from 4.7 percent to 5.3 percent, while Pima County's rate rose from 3.6 percent to 4.2 percent.

In fact, all of Arizona's counties experienced higher unemployment rates in October, except in Greenlee County where the rate (6.6 percent) remained the same. And five of Arizona's 15 counties — Apache, Gila, Navajo, Santa Cruz, and Yuma — were experiencing double-digit unemployment rates in October.

Although the number of unemployed in Arizona climbed in October, the number of non-farm payroll jobs continued to grow. Non-farm payroll employment increased 15,700 with all of the gain coming in three major industry groups — trade, services, and government. These industry groups account for more than two-thirds of the wage and salary jobs in Arizona and almost all of the over-the-year job growth (October 1990 to October 1991).

Government Led All Sectors

The industry group with the largest employment gain in October was government, which added 10,200 positions. Another month of school-employment gains and an increase in state government employment, due mainly to State Fair workers, accounted for most of the increase.

Services had the next largest gain, increasing by 4,700. Miscellaneous services added the most jobs (2,600), followed by health services (1,000), hotels and other lodging places (600), and business services (500). Over the year, services added 16,800 jobs to the Arizona economy, growing at a 4.1 percent pace.

Trade added 2,700 jobs in October, a slow month when compared to the 10-year average increase of 4,600 jobs. Both wholesale trade (up 400) and retail trade (up 2,300) came in below their 10-year average gains. Employment increases by general merchandise and apparel stores and the catchall category of "other retail" were responsible for most of retail trade's gains.

All other major industry groups in Arizona lost employment in October with manufacturing and mining showing the smallest declines. Manufacturing lost 100 jobs in the durable goods sector, while non-durable goods was unchanged. A loss of 300 in the aircraft and missiles sector of durable goods was partially offset by gains of 100 in both the machinery and the lumber and wood products sectors. Mining, on the other hand, showed a normal seasonal decline of 100 with all of the loss occurring in copper mining.

FIRE Continues to Falter

FIRE (finance, insurance, and real estate) continued to experience problems in October, losing another 300 jobs. FIRE has lost employment in three of the last four months and is down by 1 percent over-the-year.

Employment in TCPU (transportation, communications, and public utilities) fell 500 in October as the industry group had its fourth straight monthly decline and has lost jobs in eight out of the last 10 months. Over the year, employment in Arizona's transportation sector is down 1.1 percent, while communications and public utilities employment is off 3.9 percent.

The Arizona industry group that had the largest drop in employment in October was construction, which lost 900 jobs. But construction losses of this magnitude are a normal seasonal occurrence in October. Construction's losses were concentrated mainly in special trades; general construction was down slightly. Losses in

(Continued on page 12)

Arizona Labor Force and Employment
October 1991 (in Thousands)

	ARIZONA					MARICOPA COUNTY					PIMA COUNTY				
				AMOUNT CHANGE					AMOUNT CHANGE					AMOUNT CHANGE	
	Oct.* 1991	Sept.** 1991	Oct. 1990	Sept. - Oct.	1990 - 1991	Oct.* 1991	Sept.** 1991	Oct. 1990	Sept. - Oct.	1990 - 1991	Oct.* 1991	Sept.** 1991	Oct. 1990	Sept. - Oct.	1990 - 1991
TOTAL CIVILIAN LABOR FORCE* **	**1714.4**	**1709.7**	**1738.6**	**4.7**	**-24.2**	**1061.9**	**1060.0**	**1078.9**	**1.9**	**-17.0**	**317.0**	**317.4**	**318.3**	**-0.4**	**-1.3**
Total Unemployment	**103.2**	**95.1**	**83.1**	**8.1**	**20.1**	**56.4**	**51.5**	**42.1**	**4.9**	**14.3**	**13.3**	**11.7**	**11.6**	**1.6**	**1.7**
Unemployment Rate	**6.0%**	**5.6%**	**4.8%**	**—**	**—**	**5.3%**	**4.9%**	**3.9%**	**—**	**—**	**4.2%**	**3.7%**	**3.7%**	**—**	**—**
Unemployment Rate (Sea. Adj.)*****	**6.1%**	**5.4%**	**4.8%**	**—**	**—**	**5.3%**	**4.7%**	**3.8%**	**—**	**—**	**4.2%**	**3.6%**	**3.7%**	**—**	**—**
Total Employment	**1611.2**	**1614.6**	**1655.5**	**-3.4**	**-44.3**	**1005.5**	**1008.5**	**1036.8**	**-3.0**	**-31.3**	**303.7**	**305.7**	**306.5**	**-2.0**	**-2.8**

Note: Above labor force statistics should not be used for economic-assistance programs

NON-AGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

TOTAL WAGE AND SALARY	**1536.3**	**1520.6**	**1516.1**	**15.7**	**20.2**	**1008.7**	**997.2**	**1001.5**	**11.5**	**7.2**	**265.5**	**263.5**	**257.8**	**2.0**	**7.7**
Manufacturing	**178.9**	**179.0**	**185.6**	**-0.1**	**-6.7**	**132.6**	**132.6**	**138.0**	**0.0**	**-5.4**	**25.3**	**25.3**	**26.4**	**0.0**	**-1.1**
Durable Goods	132.3	132.4	139.1	-0.1	-6.8	100.1	100.3	105.2	-0.2	-5.1	19.5	19.4	20.6	0.1	-1.1
Stone, Clay, and Glass	6.2	6.2	6.9	0.0	-0.7	3.4	3.5	4.1	-0.1	-0.7					
Primary and Fabricated Metals	13.9	13.9	14.3	0.0	-0.4	9.4	9.4	9.6	0.0	-0.2					
Primary Metals	6.2	6.2	6.2	0.0	0.0										
Fabricated Metals	7.7	7.7	8.1	0.0	-0.4										
Machinery	56.6	56.5	59.3	0.1	-2.7	47.0	46.9	49.1	0.1	-2.1					
Aircraft and Missiles	24.3	24.6	27.3	-0.3	-3.0										
Lumber and Wood Products (Excluding Furniture)	6.6	6.5	6.6	0.1	0.0										
Nondurable Goods	46.6	46.6	46.5	0.0	0.1	32.5	32.3	32.8	0.2	-0.3	5.8	5.9	5.8	-0.1	0.0
Food and Kindred Products	11.1	11.0	10.4	0.1	0.7	7.4	7.2	7.0	0.2	0.4					
Printing and Publishing	16.9	17.0	17.6	-0.1	-0.7	11.8	11.8	12.4	0.0	-0.6					
Mining and Quarrying	**13.2**	**13.3**	**12.6**	**-0.1**	**0.6**	**0.7**	**0.7**	**0.8**	**0.0**	**-0.1**	**2.4**	**2.4**	**2.2**	**0.0**	**0.2**
Copper Mining	10.6	10.7	9.9	-0.1	0.7										
Construction	**80.3**	**81.2**	**84.9**	**-0.9**	**-4.6**	**52.2**	**52.9**	**57.1**	**-0.7**	**-4.9**	**15.4**	**15.6**	**15.2**	**-0.2**	**0.2**
Trans., Communications, & Public Utilities	**80.4**	**80.9**	**82.3**	**-0.5**	**-1.9**	**55.8**	**56.6**	**59.0**	**-0.8**	**-3.2**	**10.7**	**10.5**	**9.6**	**0.2**	**1.1**
Transportation	45.9	46.4	46.4	-0.5	-0.5	33.2	33.9	35.1	-0.7	-1.9	6.1	6.0	5.0	0.1	1.1
Communications and Public Utilities	34.5	34.5	35.9	0.0	-1.4	22.6	22.6	23.9	0.0	-1.3	4.6	4.5	4.6	0.1	0.0
Trade	**380.4**	**377.7**	**372.9**	**2.7**	**7.5**	**257.4**	**254.7**	**250.6**	**2.7**	**6.8**	**61.6**	**61.5**	**60.6**	**0.1**	**1.0**
Wholesale Trade	75.7	75.3	75.5	0.4	0.2	61.1	60.8	61.3	0.3	-0.2	7.4	7.4	7.5	0.0	-0.1
Retail Trade	304.7	302.4	297.4	2.3	7.3	196.3	193.9	189.3	2.4	7.0	54.2	54.1	53.1	0.1	1.1
General Merchandise and Apparel	49.1	47.9	47.4	1.2	1.7	30.1	29.4	29.0	0.7	1.1	8.8	8.8	8.5	0.0	0.3
Food Stores	50.9	50.8	49.9	0.1	1.0	32.3	32.3	31.4	0.0	0.9	9.1	9.2	8.8	-0.1	0.3
Automotive and Service Stations	35.3	35.5	34.9	-0.2	0.4	22.2	22.3	21.6	-0.1	0.6	5.7	5.8	5.6	-0.1	0.1
Eating and Drinking Places	108.7	109.0	105.8	-0.3	2.9	71.0	70.2	68.0	0.8	3.0	19.8	19.9	19.3	-0.1	0.5
Finance, Insurance, and Real Estate	**94.6**	**94.9**	**95.6**	**-0.3**	**-1.0**	**75.7**	**75.8**	**76.3**	**-0.1**	**-0.6**	**11.6**	**11.7**	**11.7**	**-0.1**	**-0.1**
Services and Miscellaneous	**428.3**	**423.6**	**411.5**	**4.7**	**16.8**	**289.5**	**285.7**	**279.6**	**3.8**	**9.9**	**79.5**	**78.4**	**75.1**	**1.1**	**4.4**
Hotels and Lodging Places	44.5	43.9	43.3	0.6	1.2	28.1	26.9	26.7	1.2	1.4	6.6	6.3	6.2	0.3	0.4
Business Services*****	83.3	82.8	79.7	0.5	3.6	66.3	66.0	64.2	0.3	2.1	12.2	12.0	11.1	0.2	1.1
Health Services	105.6	104.6	102.1	1.0	3.5	67.8	67.2	66.2	0.6	1.6	23.2	23.1	22.1	0.1	1.1
Government	**280.2**	**270.0**	**270.7**	**10.2**	**9.5**	**144.8**	**138.2**	**140.1**	**6.6**	**4.7**	**59.0**	**58.1**	**57.0**	**0.9**	**2.0**
Federal	45.8	45.9	45.8	-0.1	0.0										

* Preliminary
** Revised
*** Adjusted to the Current Population Survey to reflect place of residence

**** Normal seasonal variations have been eliminated to reflect underlying economic trends
***** Business Services underwent a series break between December 1987 and January 1988

Note: Annual averages may not total correctly due to rounding

Prepared by the Arizona Dept. of Economic Security, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Non-metropolitan Counties
Labor Force and Employment
October 1991

	Apache	Cochise	Coconino	Gila	Graham	Greenlee
CIVILIAN LABOR FORCE*	15,525	35,375	44,625	13,175	8,350	3,475
Total Unemployment	1,925	2,575	2,800	1,325	550	225
Rate	12.5%	7.3%	6.3%	10.0%	6.7%	6.6%
Rate (Seas. Adj.)**	14.8%	7.7%	7.1%	10.5%	6.7%	6.6%
Total Employment	13,600	32,800	41,825	11,850	7,800	3,250

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

	Apache	Cochise	Coconino	Gila	Graham	Greenlee
TOTAL WAGE AND SALARY	16,600	26,100	43,450	11,775	5,700	3,575
Manufacturing	550	1,125	3,450	1,450	225	25
Mining & Quarrying	25	100	75	1,325	0	2,000
Construction	450	1,025	1,575	600	175	400
T.C.P.U.	1,300	1,725	2,600	525	125	50
Trade	1,500	5,125	10,050	2,400	1,575	300
F.I.R.E.	450	650	850	300	125	25
Services & Misc.	5,825	4,975	11,225	2,425	900	175
Government	5,900	11,375	13,625	2,750	2,575	600

	La Paz	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
CIVILIAN LABOR FORCE*	5,500	38,025	26,950	38,050	12,050	41,850	52,550
Total Unemployment	525	2,700	2,625	3,325	2,300	2,275	10,325
Rate	9.5%	7.1%	9.7%	8.7%	19.0%	5.5%	19.7%
Rate (Seas. Adj.)**	9.5%	7.4%	11.0%	9.4%	15.4%	5.6%	23.4%
Total Employment	4,975	35,325	24,325	34,725	9,750	39,575	42,225

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

	La Paz	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
TOTAL WAGE AND SALARY	4,050	28,025	22,000	31,325	10,900	29,800	28,975
Manufacturing	275	2,550	1,975	3,750	1,025	2,475	2,150
Mining & Quarrying	75	50	1,225	4,150	25	1,075	50
Construction	300	2,700	825	475	300	2,500	1,400
T.C.P.U.	150	1,300	1,575	1,075	750	1,050	1,025
Trade	1,325	8,050	4,425	5,475	4,800	7,800	8,625
F.I.R.E.	100	1,400	450	725	275	1,025	1,000
Services & Misc.	825	7,150	5,125	5,025	1,875	7,475	6,275
Government	1,000	4,825	6,400	10,650	1,850	6,400	8,450

* Adjusted to the Current Population Survey (CPS) to reflect place of residence.

** Seasonal adjustment not applicable for economic assistance programs.

T.C.P.U. = Transportation, Communications, and Public Utilities
F.I.R.E. = Finance, Insurance, and Real Estate

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Estimated Hours and Earnings of Production Workers in Selected Industries
Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Oct.* 1991	Sep.** 1991	Oct. 1990	Oct.* 1991	Sep.** 1991	Oct. 1990	Oct.* 1991	Sep.** 1991	Oct. 1990
Manufacturing	$442.65	$444.99	$416.70	41.1	40.9	40.3	10.77	10.88	10.34
Aircraft & Missiles	642.79	662.07	651.62	44.3	45.1	45.6	14.51	14.68	14.29
Food & Kindred Prod.	328.32	328.86	344.16	38.9	37.8	38.8	8.44	8.70	8.87
Primary Metals	511.46	511.63	512.45	40.4	40.8	38.3	12.66	12.54	13.38
Machinery	455.26	452.92	373.98	41.5	41.1	38.2	10.97	11.02	9.79
Copper Mining	653.67	645.17	613.99	43.9	43.8	43.3	14.89	14.73	14.18
Construction	452.84	442.23	462.43	37.8	37.1	38.6	11.98	11.92	11.98
Utilities	757.77	755.06	736.27	43.6	42.3	44.3	17.38	17.85	16.62
Retail Trade**	273.58	281.01	257.75	32.3	32.6	32.3	8.47	8.62	7.98
Wholesale Trade	414.72	413.00	390.91	38.4	38.1	38.1	10.80	10.84	10.26

Estimated Hours and Earnings of Production Workers in Selected Industries
Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Oct.* 1991	Sep.** 1991	Oct. 1990	Oct.* 1991	Sep.** 1991	Oct. 1990	Oct.* 1991	Sep.** 1991	Oct. 1990
Manufacturing	$459.12	$461.20	$446.71	41.7	41.7	41.4	11.01	11.06	10.79
Construction	465.11	462.15	487.04	37.6	37.3	39.5	12.37	12.39	12.33
Retail Trade**	287.97	298.15	265.52	33.1	33.5	32.7	8.70	8.90	8.12
Wholesale Trade	426.73	423.12	412.68	38.9	38.5	38.0	10.97	10.99	10.86

Estimated Hours and Earnings of Production Workers in Selected Industries
Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Oct.* 1991	Sep.** 1991	Oct. 1990	Oct.* 1991	Sep.** 1991	Oct. 1990	Oct.* 1991	Sep.** 1991	Oct. 1990
Manufacturing	$414.63	$423.50	$354.05	40.1	40.8	36.5	10.34	10.38	9.70
Construction	390.22	388.87	395.63	36.3	37.0	36.7	10.75	10.51	10.78
Utilities	635.30	661.15	634.54	41.2	42.3	41.5	15.42	15.63	15.29

* Preliminary.

** Revised

*** Excludes eating and drinking places.

Note: These estimates are based on a sample of full- and part-time production and related employees whose payroll and hours are reported for the pay period which includes the 12th of the month.

Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Arizona Labor Force and Employment
for Economic Assistance Programs
October 1991

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,714,480	1,611,249	103,231	6.0%
Apache	15,526	13,593	1,933	12.5
Cochise	35,372	32,803	2,569	7.3
Coconino	44,640	41,830	2,810	6.3
Gila	13,177	11,855	1,322	10.0
Graham	8,368	7,808	560	6.7
Greenlee	3,478	3,249	229	6.6
La Paz	5,495	4,972	523	9.5
Maricopa	1,061,949	1,005,500	56,449	5.3
Mohave	38,036	35,324	2,712	7.1
Navajo	26,943	24,325	2,618	9.7
Pima	317,025	303,743	13,282	4.2
Pinal	38,034	34,717	3,317	8.7
Santa Cruz	12,028	9,739	2,289	19.0
Yavapai	41,861	39,576	2,285	5.5
Yuma	52,549	42,214	10,335	19.7

These figures are the only official BLS labor statistics to be used for revenue sharing purposes. They are not designed to be used as economic indicators.

NOTE: Series for Yuma and La Paz counties start January 1983.
Data are not comparable to any past series.

Labor Force

(Continued from page 7)

special trades have accounted for more than half of the 4,600 over-the-year decline in construction employment.

Non-farm payroll employment continues to show over-the-year growth in Arizona, but the gain has deteriorated. In January, over-the-year job growth was 3.5 percent, but by October the rate had fallen to 1.3 percent. In the early part of 1991, manufacturing and construction were responsible for most of the weakness in the Arizona economy. In recent months, however, TCPU and FIRE have also contributed to the state's sluggish economic performance.

Arizona may have escaped most of the ill effects of a national recession in the first half of 1991, but the prolonged weakness in the national economy is having its effects now. Without some major improvements nationally, the Arizona economy should continue to remain weak for the near-term.

—Dennis Doby
RA Economist

(Continued from page 5)

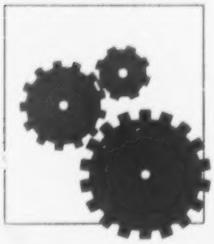
Proposals

approach to providing health, social, and other developmental services" to Arizona's young children. This would be done through expanding and analyzing existing services and early learning programs (e.g., HeadStart funds), and encouraging greater business involvement in early childhood development (e.g., child-care programs). The final proposal calls for a four-part strategy to take advantage of the state's ethnic diversity as Arizona not only competes for business on a national, but international level. The initiative suggests: 1) educating companies about the advantages of having multicultural workforces; 2) improving and heightening interest in international education and business throughout the state's educational system; 3) promoting the learning of languages in schools; and 4) devising strategies to keep minorities from dropping out of school.

—DES, Research Administration

Hughes, Burr-Brown Announce Layoffs; Jet Facility Should Add Jobs in Tucson

"New Developments" is featured each month as a service to our readers. This section is a compilation of public announcements and articles from newspapers and periodicals about events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of business news is not possible. In addition, the Arizona LMI Newsletter is not responsible for incorrect information reported by these sources.



MANUFACTURING — The Tucson metropolitan area received some disturbing news in November from two of its major employers, Hughes Aircraft Co. and Burr-Brown Corp. **Hughes announced it will be eliminating 1,600 well-paying jobs** by the end of 1992 as contracts run out with the Defense Department for two types of missiles. The losses, which represent nearly one-third of Hughes' workforce in Tucson, will affect production workers (900), salaried production workers (400), and salaried positions in support organizations. Hughes' employment in Tucson has steadily declined since it peaked at 9,000 in 1986. Meanwhile, **Burr-Brown**, which manufactures precision-microelectronics products, says it **plans to eliminate about 240 jobs**, or 20 percent of its workforce, by early next year as part of a restructuring plan. The layoffs will affect a wide range of technical, professional, and managerial positions. A global recession is blamed for the cutbacks, which come on top of the elimination of about 100 positions in 1989.

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The news wasn't all bad for the Tucson area as a newly opened **jet-maintenance facility at Tucson International Airport expects to add 100 positions** over the next few years. The Canadair Challenger service center, part of a $2.8 million renovation project, services Challenger business jets, which are a larger cousin of the Learjet. Since Bombardier Inc. of Montreal purchased Learjet 18 months ago, employment at the Learjet and Challenger operations in Tucson has grown from 250 to 360.

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McDonnell Douglas Helicopter Co. is expected to build a 75,000-square-foot metal-processing plant at its Mesa facilities. The $8 million plant, which will be used to clean, paint, and do other preparation work for metal parts, should open in 1993. No details about potential employment were made available, but it is expected that work from a similar plant in Culver City, Calif., will be shifted to the Mesa operation.

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The U.S. subsidiary of a major French marketing and manufacturing company, Groupe Legris Industries, is moving its North American headquarters and some of its manufacturing operations to Mesa. **Legris Inc.** of Rochester, N.Y., which produces metal and plastic fittings, connectors, and valves, **plans to initially build a 20,000-square-foot facility** on 10 acres near the Superstition Freeway and Power Road. Legris expects to employ about 40 workers there beginning next fall.

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Pending approval of zoning changes and other considerations, **Volkswagen of America Inc.** will purchase 1,600 acres near the town of Maricopa in Pinal County for a **new automobile-test track and related facilities**. Volkswagen, which currently tests cars at Phoenix International Raceway, expects the test track to be operational next December and employ around 30 people.

—

Stone Forest Industries cited a lack of timber as the reason for its plans to **lay off 60 workers** at its Flagstaff sawmill by the end of the year. Studies on the effects of tree cutting in three national forests in Arizona have required a 15 percent cutback in tree cutting in those forests. With these layoffs, 200 workers will have lost jobs this year at Stone Forest's operations in Flagstaff, Eager, and at Kaibab Industries' mill in Fredonia.

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Garrett Auxiliary Power Division of Phoenix, which manufactures gas-turbine engines for airplanes, will **eliminate 115 jobs in January**, or 5 percent of its workforce. A division of Allied-Signal Aerospace Co., Garrett Auxiliary Power has laid off 320 workers in 1991 and Garrett's five divisions in the Valley have let go more than 1,600 workers the past 12 months — with more layoffs expected in 1992. A slowdown in the aerospace industry is blamed for the cutbacks.

CONSTRUCTION — **Westcor Partners**, which owns many of the Valley's shopping malls, has **announced plans for major expansion and remodeling of some of its existing properties**, as well the building of a new "power center" in Peoria. Westcor expects to begin remodeling the Colonnade Mall, 18th Street and Camelback Road, in early 1992, which will include construction of a 40,000-square-foot Bally's U.S. Swim & Fitness Center and remodeling of a former 100,000-square-foot Sears store for use by one to three tenants. The Phoenix-based company also plans to add 200,000 square feet to Westridge Mall, 75th Avenue and Thomas Road, with the addition of a Mervyn's and Montgomery Ward. A third project calls for a $15 million renovation of MetroCenter — from new skylights to food court — beginning in January with completion set for October. Finally, Westcor is negotiating with city of Peoria officials to construct a 550,000-square-foot North Valley Power Center at 83rd Avenue and Bell Road that would be anchored by Target and Ross Dress for Less stores. If all goes according to plan, work would begin early in 1992, and three additional anchor stores will be added on later to the 52-acre site.

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PMH Health Resources Inc., which operates Phoenix Memorial Hospital, has been **given final approval by the city of Goodyear to build a $150 million medical mall** that eventually will include 800,000 square feet of space. First up will be a two-story, 25,000-square-foot office building with construction expected to begin in early 1992. Following completion of that project will be the construction of several facilities that offer outpatient diagnostic and treatment services, outpatient surgery, and professional services. Finally, when the population of the surrounding area reaches 75,000, a 240-bed hospital and several extended-care facilities will be built. All will be built on 36 acres in Litchfield Park at Litchfield Road and Interstate 10.

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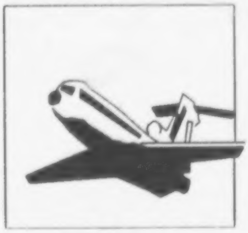
Work is set to begin on three other major health-care projects in the Valley — the Mayo Clinic Scottsdale's $27 million Samuel C. Johnson Medical Research Center, and medical office buildings next to Arrowhead Community Hospital in Glendale and Humana Hospital-Desert Valley in north Phoenix. The 75,000-square-foot research center, which will study diseases such as cancer and arthritis, is scheduled to open in mid-1993. A 30,000-square-foot office building adjacent to Arrowhead Community Hospital, 18701 N. 67th Ave., is the first of several projects for the hospital's campus and should be finished by next June. And zoning approval by the city of Phoenix was recently granted for a 88,000-square-foot medical building as part of Humana's campus at 38th Street and Bell Road. No completion date was given.



TRANSPORTATION, COMMUNICATIONS and PUBLIC UTILITIES — **Alaska Airlines plans to add 85 employees to its reservations center** in Tempe by early 1992. The Seattle-based air carrier says the Tempe facility has hired between 85 and 100 workers a year since its opening in 1989. Phoenix and Tucson, meanwhile, are awaiting news of the location of a new Alaska Airlines' maintenance facility, which is expected to eventually employ around 2,000 workers with an average salary of about $40,000. The two Arizona cities found out in early November they are among five U.S. cities in the hunt for the center. The airline is expected to make a decision by the end of March.

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Lufthansa German Airlines is expected to purchase from PS Group of San Diego a **pilot-training facility at Phoenix-Goodyear Municipal Airport in Goodyear by early 1992.** Before the sale, however, 70 of the facility's approximately 300 workers will lose their jobs; those remaining are expected to take a 10 percent pay cut. About 300 pilots a year receive training at the center, primarily for Lufthansa, All Nippon Airways, Air France, and Iberia Airlines.

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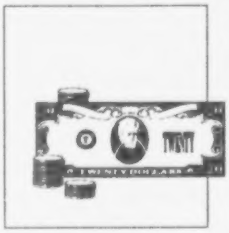
Dallas-based **Southwest Airlines plans to add nearly 600 employees to its Valley workforce in 1992**, primarily due to an increase in flights from Phoenix Sky Harbor International Airport. Southwest expects to hire 300 flight attendants, 80 pilots, 50 reservation agents, and 150 workers at its new maintenance facility at Sky Harbor. The air carrier recently added flights on routes where flights were dropped by Phoenix-based America West Airlines, which filed for bankruptcy protection in June and has cut its Arizona and nationwide workforce in recent months.



FINANCE, INSURANCE AND REAL ESTATE — **First Interstate Bank of Arizona** announced in mid-November plans to **eliminate the equivalent of 387 full-time positions** in the state by the end of January as part of a corporate-wide restructuring plan. First Interstate, which currently is the second largest Arizona bank in terms of assets, plans to close 21 branches throughout the state; 13 in Phoenix, four in Tucson, and one each in Green Valley, Sedona, Yuma, and Clarkdale. First Interstate Bank of Arizona is a subsidiary of First Interstate Bancorp. of Los Angeles.

TRADE — **Five of six El Pollo Loco restaurants in the Valley closed** in mid-November, forcing the layoff of about 70 employees. The Irvine, Calif.-based chain of fast-food chicken restaurants said it was not able to increase its volume enough to overcome the increasing cost of doing business. Some employees will be offered jobs in California and at Denny's restaurants that the chain owns. One El Pollo Loco store each in Phoenix and Yuma will continue to operate.

—

Ironically, **RB Furniture**, also based in Irvine, California, will be **closing up shop in Arizona** by the end of January. Six outlets, five in Phoenix and one in Tucson, are being liquidated in order to raise cash to save the company's 28 stores in California and 10 outlets in three other western states. About 200 Arizona employees will have to find other work. RB Furniture filed for protection under Chapter 11 of U.S. bankruptcy laws in November.

—

Ground is expected to be broken in late 1992 on the Spectrum Fashion Mall, a regional shopping center at Interstate 10 and the Superstition Freeway in Tempe, which will nearly equal the size of Phoenix' MetroCenter. The first phase of the 1.3 million square-foot mall will be anchored by a Bullock's and two other department stores and is expected to open in 1994. Two other department stores will eventually be added to the mall, which will be part of Spectrum Center, a $400 million mixed-use development that will include office buildings and residential property.

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About 10 percent of Circle K Corp.'s 700 convenience stores in Arizona will close as part of a company plan to shut down or sell 40 percent of its 3,800 stores nationwide. Since filing for bankruptcy protection in 1990, the Phoenix-based chain has closed 800 stores around the nation. Circle K, which employs about 3,300 workers in the Valley, says that employees at stores that are closed will likely be offered work at other Circle K stores or be kept on by owners who purchase stores and continue to operate them.

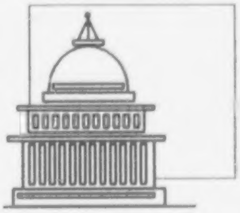
SERVICES — Residents of **Holbrook will lose their only hospital** sometime in early 1992 due to lack of use and the city's inability to continue to absorb mounting losses. The hospital's shutdown will force the lay off of 25 employees who may have to find employment at the two nearest hospitals in Winslow and Show Low, 30 and 50 miles away, respectively. Since 1987, the hospital has lost about $1.4 million. The city operates on annual budget of $6.5 million.

McDonnell Douglas Travel Co., based in Huntington Beach, Calif., will **locate a reservations center in Phoenix** that will initially employ 105 workers and may eventually expand to nearly 300. The state Commerce and Economic Development Commission approved a $700,000, low-interest loan in early December to help lure the company, which works only with corporate clients. Average salary of the reservation agents is expected to be around $25,000, which would be above the industry norm.

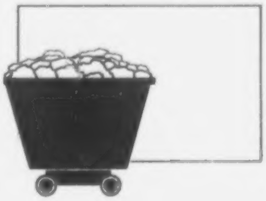
Kenney Enterprises of Mesa, which recently purchased Island of Big Surf in Tempe and Water World USA in Phoenix, has contracted with R & R Creative Design of Anaheim to **renovate the two recreation properties**. Big Surf will take on a Polynesian atmosphere while Water World USA will receive a safari makeover.

Occupancy rates for Valley hotels and resorts in September was at 62.5 percent, well below the 70 percent rate normally considered necessary to break even. For the year ending in September, Valley hotels had added 838 rooms, or a 2.5 percent increase, while the demand for rooms had increased 1 percent. Room rates, however, were $71.17 in September, compared to $69.89 a year earlier. One hospitality expert is predicting a sluggish peak season (January through March) for the Phoenix area, but a better-than-average second quarter.

GOVERNMENT — The **city of Phoenix will cut 115 street-department jobs** in January, either through layoffs, early retirements, or reassignments. A 10 percent reduction in the city's share of state highway-users taxes forced the cutbacks, approved by the Phoenix City Council in November. Sixteen miles of arterial-street improvements planned for fiscal year 1991-92 were cut in half due to a projected loss of $7.3 million in highway-users funds.



MINING — Colorado-based **AZCO Mining Co. plans to open a copper mine** 10 miles northeast of Safford next summer if an environmental-impact study is positive. The open-pit mine on 1,400 acres of federal land is expected to yield 25,000 tons of copper over about 17 years. There is no information on employment at this time.



MISCELLANEOUS — **Arizona has signed reciprocity agreements with Utah and Nevada** that should make it easier for contractors to work in each state. Under the agreements, in most cases — plumbers and electricians are excluded from the pacts — all three states will waive trade-exam requirements and accept each others' licensing qualifications, but applicants will still have to pass business-management tests. In August, Arizona signed a similar agreement with California. More information on the agreements can be obtained by contacting the Arizona Registrar of Contractors.

The Arthur Anderson accounting firm has released its list of the **largest 100 independent, privately held employers in Arizona**. The top 10 included: Amerco (U-Haul International), Phoenix; Shamrock Foods Co., Phoenix; Discount Tire Co., Scottsdale; Sundt Corp., Tucson; Bar-S Foods Co., Phoenix; Gosnell Builders, Phoenix; Sun Land Beef Co., Tolleson; Forever Living Products International Inc., Phoenix; Kitchell Corp., Phoenix; and United Dairymen of Arizona, Tempe. The trade sector had 32 companies in the list, followed by the category of construction and real estate (26), and manufacturing (18).

Smith's Food and Drug Centers has come to terms with the United Food and Commercial Workers Union, which represents 2,500 employees in its stores in Maricopa and Pima counties. The agreement came a month and a half after the Salt Lake City-based supermarket chain recognized the union when 75 percent of the stores' employees signed cards supporting having organized representation. The three-year agreement, which includes separate contracts for meat cutters and workers outside the meat department, covers health and pension benefits, as well as wages. The union also represents workers at three other grocery chains in the state — ABCO, Fry's, and Safeway.

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LABOR MARKET INFORMATION
NEWSLETTER

Vol. XVI No. 1
January 1992

Unemployment Rate

Seasonally Adjusted
November 1991*

ARIZONA	5.4%
Maricopa Co.	4.5
Pima Co.	3.9
United States	6.2

Consumer Price Index

U.S. – November 1991
Base = 1982-84

Wage Earner/Clerical Worker	132.8
% Chg. Year Ago	5.5
All Urban	134.6
% Chg. Year Ago	5.7

Phoenix – 4th Qtr 1991
Base = 1982-84

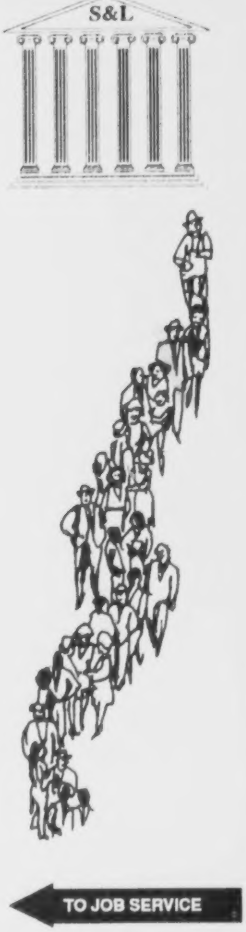
All Urban	138.4
% Chg. Year Ago	2.3

Tucson CPI No Longer Available (see May 1991 *Arizona LMI Newsletter*

* Preliminary

Employment Slide

Arizona Thrift Failures Caused Dramatic Drop in S&L Jobs in State



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Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

Thrift Employment Continued Free Fall Through June '91

Note: In light of the recent collapse of Arizona's savings and loan (S&L) industry, an article in the December 1990 issue of the Arizona Labor Market InformationNewsletter examined state employment trends at S&Ls and commercial banks from January 1988 through December 1989. This month, a follow-up article looks at Arizona employment at S&Ls and banks from January 1990 through June 1991.

Review and Overview

The December 1990 *Arizona LMI Newsletter* article pointed out that state S&L employment dropped sharply (42 percent) from January 1988 through December 1989, but 65 percent (2,800 jobs) of the loss was due to non-economic code changes (made effective in January 1989), not failed or failing savings and loans. Non-economic code changes are used to revise coding structure, correct codes that were incorrectly assigned, or to show a gradual shift in activities of the establishment reporting units. In this case, incorrect codes had artificially inflated S&L employment and underreported commercial bank employment.

According to data generated and compiled by state and federal unemployment insurance (UI) programs (see below), Arizona S&L employment declined from a high of 10,256 in January 1988 to a low of 5,918 in December 1989. At the same time, Arizona commercial bank employment rose — although not in the same proportion or in as consistent a fashion — from 16,670 to 18,661. However, employment in depository institutions, the major industry group that encompasses S&Ls and commercial banks (see below), fell only 1.7 percent, from 33,473 to 32,888.

The reason Arizona thrift failures didn't cause additional S&L employment losses during the period analyzed was because most of the state's thrifts during 1989 were still in government control, which tends to stabilize employment. According to federal documents, no Arizona-based S&L was sold by the federal agencies responsible for disposing of thrift assets, the Resolution Trust Corp. (RTC) and Federal Savings & Loan Insurance Corp. (FSLIC), during 1988 or 1989.[1]

Table 1. Seized Arizona Savings and Loans That Were Sold, January 1990-June 1991

Institution:	Universal Federal Savings & Loan Association, Scottsdale
Acquirer:	First Arizona Savings & Loan Association, Glendale
Institution:	Western Savings & Loan Association, Phoenix
Acquirer:	Bank of America Arizona, Phoenix
Institution:	Sentinel Savings & Loan Association, Phoenix
Acquirer:	Biltmore Investors Bank, Phoenix
Institution:	MeraBank, Phoenix
Acquirer:	Bank of America Arizona, Phoenix
Institution:	Sun State Savings and Loan Association, Phoenix
Acquirer:	Bank of America Arizona, Phoenix
Institution:	Pima Savings & Loan Association, Tucson
Acquirer:	Bank of America Arizona, Phoenix
Institution:	Security Savings & Loan Association, Scottsdale
Acquirers:	Security Pacific Bank Arizona, Phoenix; World Savings, Oakland, California

Source: *The Arizona Republic, July 1991*

From January 1990 through June 1991, however, the RTC sold seven of eight Arizona-based S&Ls it had declared insolvent and seized.[2] Six of the seven were sold to commercial banks with one going to another thrift (see Table 1).[3]

And, as this update will detail, from January 1990 through June 1991 S&L employment in Arizona continued to decline sharply, but this time because the number of Arizona-based S&Ls continued to dwindle (three as of June 1991). Meanwhile, during 1990 Arizona commercial banks gained employment as they purchased many of the state's thrifts and absorbed many of their workers. But by the first half of 1991 employment in both S&Ls and commercial banks was declining as banks in Arizona initiated cost-cutting measures to offset growing revenue losses.

For this and the previous article, employment data generated and compiled by state and federal unemployment insurance (UI) programs were analyzed.[4] These programs categorize employment by industry using codes from the *Standard Industrial Classification (SIC) Manual — 1987*.[5,6]

Employment: January 1990 - June 1991

To better understand the effect employment at S&Ls and other depository institutions had on finance industry employment overall, this analysis will begin with a breakdown of employment at the division (SIC one-digit code) and major industry group (SIC two-digit code) level. Savings institutions are part of the finance, insurance, and real estate (FIRE) division, and the major industry group of depository institutions.

Data in Table 2 show monthly employment levels and changes for FIRE overall and its three major divisions — finance, insurance, and real estate. From January 1990 through June 1991 FIRE lost 337 jobs, due totally to the finance division's decline of 1,288. The insurance and real estate divisions, on the other hand, had

Table 2. **Monthly Employment Totals and Net Change for Arizona Finance, Insurance, and Real Estate Division, January 1990–June 1991, All Covered Workers[1]**

	FIN	CHG	INS	CHG	RL EST	CHG	TOTAL	CHG
1990								
Jan	42158	—	25510	—	26322	—	93990	—
Feb	42327	169	25670	160	26728	406	94725	735
Mar	42612	285	25648	-22	26892	164	95152	427
Apr	42819	207	25793	145	26518	-374	95130	-22
May	43026	207	25813	20	26525	7	95364	234
Jun	43030	4	26011	198	26809	284	95850	486
Jul	43891	861	25800	-211	26536	-273	96227	377
Aug	43971	80	25820	20	26833	297	96624	397
Sep	43634	-337	25827	7	26613	-220	96074	-550
Oct	42848	-786	25507	-320	27034	421	95389	-685
Nov	42513	-335	25538	31	26903	-131	94954	-435
Dec	42291	-222	25610	72	26802	-101	94703	-251
1991								
Jan	42519	228	25135	-475	25909	-893	93563	-1140
Feb	42948	429	25251	116	26128	219	94327	764
Mar	42350	-598	25287	36	26461	333	94098	-229
Apr	41010	-1340	25479	192	26876	415	93365	-733
May	41077	67	25657	178	26931	55	93665	300
Jun	40870	-207	25782	125	27001	70	93653	-12
Net Change								
Jan 1990 - Jun 1991-		-1288		272		679		-337

Definitions:

CHG = Month-to-Month Change
FIN = Finance
INS = Insurance
RL EST = Real Estate

Note:

1. Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs.

Source: Arizona Department of Economic Security, Research Administration, ES-202 Program, 1990-1991

employment gains of 272 and 679, respectively, during this period.

Data in Table 3 give employment detail for the four major industry groups that comprise Arizona's finance division. The table shows three of the four two-digit industry groups lost employment during the 18-month period being examined with most employment losses occurring at depository institutions.

Depository institutions (SIC 60), which includes S&Ls and commercial banks, by far had the largest job loss, 1,167; security and commodity brokers, dealers, exchanges, and services (SIC 62) lost 336; and holding and other investment offices (SIC 67) dropped 294. The only major group to experience employment gains was nondepository credit institutions (SIC 61), which added 509 positions.

Of course, depository institution employ-

Table 3. Monthly Employment Totals and Net Change for Arizona Finance Industry Groups, January 1990–June 1991, All Covered Workers[1]

	SIC 60	CHG	SIC 61	CHG	SIC 62	CHG	SIC 67	CHG
1990								
Jan	31924	—	5297	—	3195	—	1742	—
Feb	31843	-81	5546	249	3171	-24	1767	25
Mar	32042	199	5677	131	3121	-50	1772	5
Apr	32222	180	5743	66	3081	-40	1773	1
May	32342	120	5887	144	3018	-63	1779	6
Jun	32121	-221	6068	181	3033	15	1808	29
Jul	33121	1000	5849	-219	3155	122	1766	-42
Aug	33188	-180	5998	-42	3061	-94	1724	-77
Sep	33008	67	5956	149	3023	-38	1647	-42
Oct	32824	-184	5777	-179	2906	-117	1341	-306
Nov	32586	-238	5748	-29	2869	-37	1310	-31
Dec	32318	-268	5789	41	2873	4	1311	1
1991								
Jan	32145	-173	6245	456	2687	-186	1442	131
Feb	32483	338	6322	77	2702	15	1441	-1
Mar	31856	-627	6343	21	2717	15	1434	-7
Apr	30969	-887	5770	-573	2846	129	1425	-9
May	30940	-29	5859	89	2838	-8	1440	15
Jun	30757	-183	5806	-53	2859	21	1448	8
Net Change								
Jan 90 - Jun 1991		-1167		509		-336		-294

Definitions:

CHG = Month-to-Month Change
SIC 60: = Depository Institutions
SIC 61: = Nondepository Credit Institutions
SIC 62: = Security and Commodity Brokers, Dealers, Exchanges, and Services
SIC 63: = Holding and Other Investment Offices

Note:

1. See Table 1.

Source: Arizona Department of Economic Security, Research Administration, ES-202 Program, 1990-1991

ment—particularly at S&Ls and commercial banks — is the major focus of this article. And further detail of depository institution employment is available by looking at three-digit SIC classifications. Depository institutions is comprised of six three-digit industry group categories:

Code	Industry Group
SIC 601	Central Reserve Depository Institutions
SIC 602	Commercial Banks
SIC 603	Savings Institutions
SIC 606	Credit Unions
SIC 608	Foreign Banking and Branches and Agencies of Foreign Banks
SIC 609	Functions Related to Depository Banking

Table 4 shows that losses at savings institutions (SIC 603) accounted for almost all of the employment declines in depository institutions during the period in question. This table also points out that commercial bank employment, which had been on the rise in 1990, began to decline in the first half of 1991. Figure 1 also graphically depicts commercial bank and savings institution employment for this period.

Table 4 shows that from January 1990 through June 1991 savings institutions experienced a loss of 3,447 positions, or a drop of 65 percent, while commercial banks (SIC 602) added 1,734 jobs, or an increase of 9.4 percent.

Table 4. **Monthly Employment Totals and Net Change for Arizona Depository Institutions, Savings and Loans, and Commercial Banks, January 1990–June 1991, All Covered Workers**[1]

	SIC 602	CHG	SIC 603	CHG	SIC 60	CHG
1990						
Jan	18365	—	5307	—	31924	—
Feb	18493	128	5330	23	31843	-81
Mar	18390	-103	5265	-65	32042	199
Apr	18530	140	5207	-58	32222	180
May	18553	23	5138	-69	32342	120
Jun	18513	-40	4918	-220	32121	-221
Jul	19490	977	4843	-75	33121	1000
Aug	19548	58	4820	-23	33188	67
Sep	19393	-155	4739	-81	33008	-180
Oct	21050	1657	2890	-1849	32824	-184
Nov	20839	-211	2882	-8	32586	-238
Dec	20608	-231	2888	6	32318	-268
1991						
Jan	20381	-227	2819	-69	32145	-173
Feb	20783	402	2752	-67	32483	338
Mar	20746	-37	2252	-500	31856	-627
Apr	20346	-400	1745	-507	30969	-887
May	20250	-96	1874	129	30940	-29
Jun	20099	-151	1860	-14	30757	-183
Net Change						
Jan 90 - Jan 91		2016		-2488		221
Jan 91 - Jun 91		-282		-959		-1388
		=====		=====		=====
Jan 90 - Jun 91		1734		-3447		-1167

Definitions:

CHG = Month-to-Month Change
SIC 602: = Commercial Banks
SIC 603: = Savings Institutions
SIC 60: = Depository Institutions (Major Group 60)

Note:

1. See Table 1.

Source: *Arizona Department of Economic Security, Research Administration, ES-202 Program, 1990-1991*

Analysis

Clearly the S&L crisis caused a major shift in employment within Arizona depository institutions — primarily from thrifts to commercial banks — during the past few years as banks purchased failed thrifts from the RTC. But more recently, commercial bank employment has suffered, too, as banks began restructuring and cost-cutting programs to offset large revenue losses.

Between 1988 and June 1991 S&L employment in Arizona plummeted 82 percent — from 10,256 to 1,860 — one-third of which can be attributed to non-economic code changes. State commercial bank employment, on the other hand, rose 20.6 percent during this 2 1/2 year period, but four-fifths of those gains can be attributed to non-economic code changes that occurred in January 1989. Overall, depository institution employment levels declined nearly 3,000, or 8.9 percent, in Arizona between January 1988 and June 1991, primarily due to consolidation after commercial banks acquired failed S&Ls.

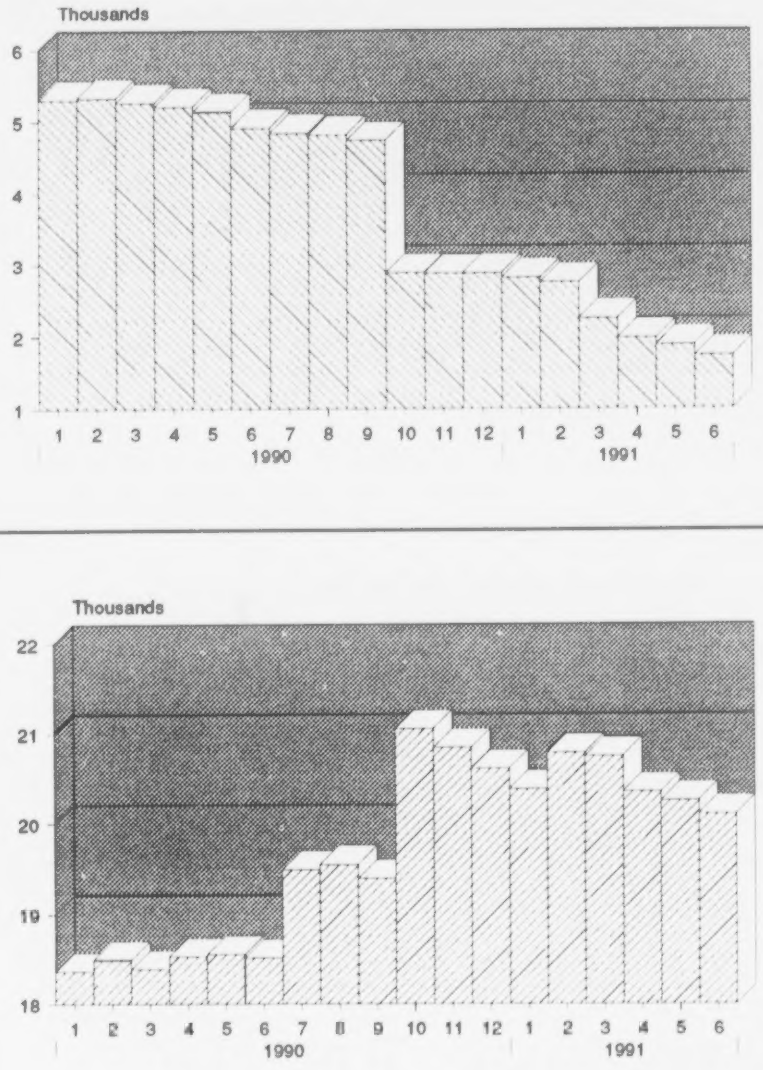
As for the near-term future, because only one Arizona-based S&L remained as of December (two were sold since June 30), job losses at savings institutions in this state should taper off beginning in 1992 with employment holding fairly constant thereafter. However, recently announced layoffs by Arizona commercial banks and the anticipated merger of Bank of America and Security Pacific could hurt commercial bank employment in the state for the foreseeable future. (If Arizona follows national trends predicted by one management-consulting firm, commercial banks in this state are likely to have job losses this year that affect teller and administrative-support positions, technical specialists, and midlevel managers.[7])

However, job losses at commercial banks are likely to be offset somewhat by an anticipated increase in credit-card servicing positions. Two major banks — Bank of America and Chase Bank of New York — have announced plans to move their credit-card operations to Arizona in 1992 and 1993 with anticipated employment between 3,000 and 4,000.[8]

Data for tables and graphs used in this article were compiled by Dennis Doby, DES, Research Administration economist.

—DES, Research Administration

Figure 1. **Monthly Employment Totals for Arizona Savings and Loans and Commercial Banks, January 1990-June 1991**



Source: Arizona Department of Economic Security, Research Administration, ES-202 Program, 1990, 1991

Notes:

1. Receivership Case List and Resolved Conservatorships Report, U.S. Department of Treasury, Office of Thrift Supervision.

2. *The Arizona Republic*, July 21, 1991, p. F2.

3. Southwest Savings & Loan Association of Phoenix was sold to Security Pacific Bank Arizona of Phoenix on July 19, 1991. Arizona based S&L's still in business were First Arizona Savings & Loan Association of Glendale and First American Federal Bank of Tucson. S&L's based elsewhere, with Arizona branches, were Great American Bank of San Diego and PriMerit Bank of Las Vegas.

4. Employment data used in this analysis are the product of a federal-state cooperative program in which state employment security agencies (SESAs) prepare summaries of employment and total pay of workers covered by unemployment insurance (UI) legislation. The summaries are a by-product of the administration of State Unemployment Insurance programs that require most employers to pay quarterly taxes based on the employment and wages of workers covered by UI.

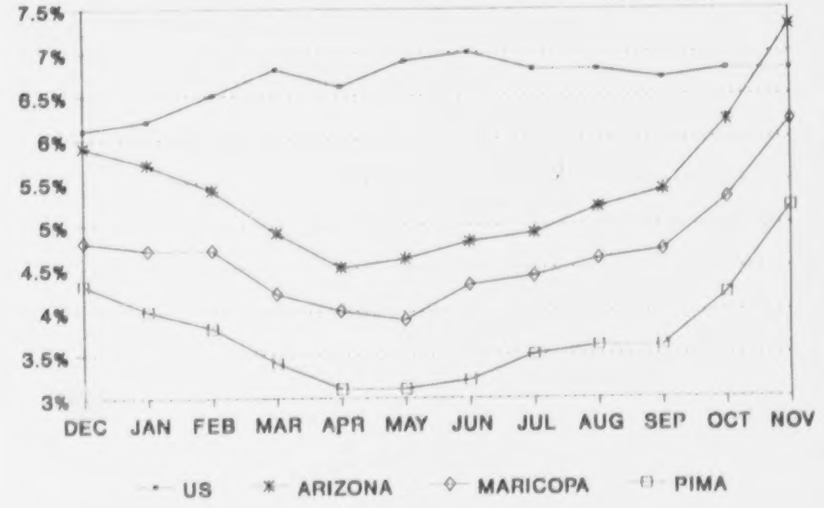
5. The Standard Industrial Classification (SIC) system is the statistical classification standard underlying all establishment-based federal economic data. The structure of the SIC system makes it possible to tabulate, analyze, and publish employment data on four levels, according to the amount of industry detail considered most appropriate. The four levels are: division (one digit), major group (two digit), industry group (three digit), and industry code (four digit).

6. Because it takes six months to tabulate, analyze, and publish establishment data generated by the UI system, only data through the second quarter of 1991 is currently available for analysis.

(Continued on page 12)

The Arizona Labor Force in November

Figure 1. U.S., Arizona, Maricopa County, and Pima County Unemployment Rates (Seasonally Adjusted), December 1990-November 1991



Source: U.S. Department of Labor, Bureau of Labor Statistics; and Arizona Department of Economic Security, Research Administration, December 1991

Impacted by a struggling national economy, Arizona's labor market showed further weakness in November. After an eight-tenths of a percentage-point increase in October, Arizona's seasonally adjusted unemployment rate climbed an additional 1.1 percentage points in November to 7.3 percent.

Arizona's unemployment rate was at its highest level since December 1986 when it was also 7.3 percent. And the 1.1 percentage-point increase from October to November represented the largest one-month gain since February 1975 when the rate was up 1.5 points.

Nationally, the unemployment rate was unchanged in November, at 6.8 percent. In Arizona, only the two metropolitan counties had unemployment rates below the national level and both experienced sizable increases from October levels. Maricopa County's rate increased nine-tenths of a point in November to 6.2 percent and Pima County's rate rose 1 point to 5.2 percent..

Despite the large rise in Arizona's unemployment rate, of note in November was an increase in the state's two employment categories — total employment and wage and salary employment. Total employment increased 4,000 last month while wage and salary employment rose 5,900. Total employment includes wage and salary employment, plus the self-employed, agricultural workers, household workers, and unpaid family workers.

But while more people went to work in November, more people were also looking for work. Total unemployment rose 14,700 in a month that normally sees a decrease in unemployment. Only two times in the last 10 years has the number of unemployed risen in November, in 1990 and 1991.

Major industry groups with employment gains in November were construction; transportation, communications, and public utilities; trade, and government. Mining held steady while major sectors losing jobs included manufacturing; finance, insurance, and real estate; and services.

While trade added 5,000 jobs in November, its over-the-year growth rate was only 0.5 percent. Within the retail trade sector, general merchandise and apparel stores, food stores, and eating and drinking places all had job increases in November. Over the year, general merchandise and apparel stores have pared employment by 1,200 and last month's increase of 1,600 is 1,200 below the 10-year average gain for November. Wholesale trade employment, on the other hand, increased by 900 in November, 100 more than the 10-year average gain for the month.

Government had the next largest increase in November with county government and schools accounting for most of the rise. The gain of 1,800 in government employment is 700 below the 10-year average increase for November.

Transportation, communications, and public utilities (TCPU) had surprisingly strong employment gains in November, adding 800 jobs after four straight months of losses. The increase was double the 10-year average gain for November, as both the transportation sector and the communications and public utilities group posted above-average gains in November. Maricopa County was responsible for more than half of the increase in TCPU employment with most of the increase concentrated in the transportation sector.

Special Trades Lifts Construction

The only other major industry group in Arizona with employment gains in November was construction. Construction employment, which normally declines by 700 in November, rose 200. Increases in the subindustry of special trades more than offset losses in general and heavy construction. Maricopa County, which had the largest gain in special trades employment, has lost 2,800 construction jobs over the year. Meanwhile, Pima County and the state's nonmetropolitan counties as a whole are currently enjoying over-the-year employment gains in construction.

Finance, insurance, and real estate (FIRE),

(Continued on page 12)

Arizona Labo Force and Employment

Novem 1991 (in Thousands)

BEST COPY AVAILABLE

	ARIZONA					MARICOPA COUNTY					PIMA COUNTY				
				AMOUNT CHANGE					AMOUNT CHANGE					AMOUNT CHANGE	
	Nov.* 1991	Oct.** 1991	Nov. 1990	Oct. - Nov.	1990 - 1991	Nov.* 1991	Oct.** 1991	Nov. 1990	Oct. - Nov.	1990 1991	Nov.* 1991	Oct.** 1991	Nov. 1990	Oct. - Nov.	1990 - 1991
TOTAL CIVILIAN LABOR FORCE* **	1733.2	1714.5	1727.9	18.7	5.3	1069.1	1061.0	1073.0	8.1	-3.9	322.4	317.7	315.3	4.7	7.1
Total Unemployment	118.2	103.5	89.1	14.7	29.1	64.2	56.5	44.7	7.7	19.5	16.6	13.4	13.0	3.2	3.6
Unemployment Rate	6.8%	6.0%	5.2%	—	—	6.0%	5.3%	4.2%	—	—	5.2%	4.2%	4.1%	—	—
Unemployment Rate (Sea. Adj.)******	7.3%	6.2%	5.4%	—	—	6.2%	5.3%	4.3%	—	—	5.2%	4.2%	4.2%	—	—
Total Employment	1615.0	1611.0	1638.8	4.0	-23.8	1004.9	1004.5	1028.3	0.4	-23.4	305.8	304.3	302.3	1.5	3.5

Note: Above labor force statistics should not be used for economic-assistance programs

NON-AGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

TOTAL WAGE AND SALARY	1541.5	1535.6	1528.7	5.9	12.8	1010.9	1007.8	1010.9	3.1	0.0	267.5	265.6	259.6	1.9	7.9
Manufacturing	177.8	178.8	184.9	-1.0	-7.1	131.5	132.6	137.4	-1.1	-5.9	25.3	25.2	26.4	0.1	-1.1
Durable Goods	131.4	132.1	138.6	-0.7	-7.2	99.2	100.0	104.7	-0.8	-5.5	19.5	19.4	20.6	0.1	-1.1
Stone, Clay, and Glass	6.0	6.2	6.7	-0.2	-0.7	3.3	3.4	3.9	-0.1	-0.6					
Primary and Fabricated Metals	13.9	13.8	14.3	0.1	-0.4	9.4	9.4	9.7	0.0	-0.3					
Primary Metals	6.2	6.1	6.2	0.1	0.0										
Fabricated Metals	7.7	7.7	8.1	0.0	-0.4										
Machinery	56.4	56.5	59.0	-0.1	-2.6	46.8	46.9	48.8	-0.1	-2.0					
Aircraft and Missiles	23.8	24.3	27.3	-0.5	-3.5										
Lumber and Wood Products (Excluding Furniture)	6.5	6.6	6.5	-0.1	0.0										
Nondurable Goods	46.4	46.7	46.3	-0.3	0.1	32.3	32.6	32.7	-0.3	-0.4	5.8	5.8	5.8	0.0	0.0
Food and Kindred Products	11.2	11.2	10.4	0.0	0.8	7.5	7.5	7.1	0.0	0.4					
Printing and Publishing	16.8	16.9	17.3	-0.1	-0.5	11.6	11.8	12.2	-0.2	-0.6					
Mining and Quarrying	13.2	13.2	12.6	0.0	0.6	0.7	0.7	0.7	0.0	0.0	2.4	2.4	2.2	0.0	0.2
Copper Mining	10.7	10.6	10.0	0.1	0.7										
Construction	80.9	80.7	82.8	0.2	-1.9	52.8	52.5	55.6	0.3	-2.8	15.6	15.4	14.8	0.2	0.8
Trans., Communications, & Public Utilities	81.1	80.3	83.2	0.8	-2.1	56.3	55.8	59.8	0.5	-3.5	10.6	10.6	9.5	0.0	1.1
Transportation	46.5	45.8	47.3	0.7	-0.8	33.6	33.2	35.9	0.4	-2.3	6.0	6.0	4.9	0.0	1.1
Communications and Public Utilities	34.6	34.5	35.9	0.1	-1.3	22.7	22.6	23.9	0.1	-1.2	4.6	4.6	4.6	0.0	0.0
Trade	384.0	379.0	382.2	5.0	1.8	258.6	255.8	257.7	2.8	0.9	62.8	61.7	61.8	1.1	1.0
Wholesale Trade	76.4	75.5	76.3	0.9	0.1	61.0	60.8	61.7	0.2	-0.7	7.6	7.5	7.5	0.1	0.1
Retail Trade	307.6	303.5	305.9	4.1	1.7	197.6	195.0	196.0	2.6	1.6	55.2	54.2	54.3	1.0	0.9
General Merchandise and Apparel	50.3	48.7	51.5	1.6	-1.2	30.5	29.5	31.6	1.0	-1.1	9.3	8.9	9.2	0.4	0.1
Food Stores	51.8	50.9	51.0	0.9	0.8	33.1	32.4	32.4	0.7	0.7	9.2	9.1	8.8	0.1	0.4
Automotive and Service Stations	35.3	35.3	34.7	0.0	0.6	22.2	22.1	21.5	0.1	0.7	5.7	5.7	5.5	0.0	0.2
Eating and Drinking Places	108.9	108.5	107.4	0.4	1.5	70.9	70.8	69.6	0.1	1.3	20.0	19.8	19.5	0.2	0.5
Finance, Insurance, and Real Estate	94.5	94.6	95.4	-0.1	-0.9	75.7	75.6	76.1	0.1	-0.4	11.6	11.6	11.8	0.0	-0.2
Services and Miscellaneous	427.7	428.6	413.2	-0.9	14.5	289.1	289.8	281.4	-0.7	7.7	79.6	79.5	75.2	0.1	4.4
Hotels and Lodging Places	44.9	44.6	43.9	0.3	1.0	28.7	28.3	27.5	0.4	1.2	6.7	6.6	6.4	0.1	0.3
Business Services*****	82.6	83.4	79.8	-0.8	2.8	65.6	66.4	64.3	-0.8	1.3	12.2	12.2	11.0	0.0	1.2
Health Services	106.1	105.6	103.0	0.5	3.1	68.0	67.8	66.8	0.2	1.2	23.4	23.2	22.3	0.2	1.1
Government	282.2	280.4	274.4	1.8	7.8	146.2	145.0	142.2	1.2	4.0	59.6	59.2	57.9	0.4	1.7
Federal	45.6	45.6	45.8	0.0	-0.2										

* Preliminary
** Revised
*** Adjusted to the Current Population Survey to reflect place of residence
**** Normal seasonal variations have bee nated to reflect underlying economic trends
***** Business Services underwent a serie between December 1987 and January 1988

Note: Annual averages may not total correctly due to rounding

Prepared by the Arizona Dept. of Economic Security, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Non-metropolitan Counties
Labor Force and Employment
November 1991

	Apache	Cochise	Coconino	Gila	Graham	Greenlee
CIVILIAN LABOR FORCE*	15,800	35,255	45,050	13,425	8,525	3,475
Total Unemployment	2,200	2,850	3,625	1,525	700	250
Rate	13.9%	8.1%	8.0%	11.4%	8.3%	7.3%
Rate (Seas. Adj.)**	15.8%	8.4%	8.5%	11.8%	8.9%	7.3%
Total Employment	13,600	32,375	41,425	11,900	7,825	3,225

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

	Apache	Cochise	Coconino	Gila	Graham	Greenlee
TOTAL WAGE AND SALARY	16,750	25,875	43,075	11,750	5,700	3,550
Manufacturing	550	1,000	3,425	1,500	225	25
Mining & Quarrying	25	100	75	1,325	0	2,000
Construction	425	975	1,525	575	175	375
T.C.P.U.	2,050	1,725	2,575	525	150	50
Trade	1,475	5,505	10,075	2,350	1,575	300
F.I.R.E.	450	650	825	300	125	25
Services & Misc.	5,875	5,025	10,925	2,400	900	175
Government	5,900	11,350	13,650	2,775	2,550	600

	La Paz	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
CIVILIAN LABOR FORCE*	5,450	38,550	27,025	38,775	12,075	42,700	55,525
Total Unemployment	625	3,600	2,950	3,625	2,000	2,850	10,550
Rate	11.4%	9.4%	10.9%	9.3%	16.5%	6.7%	19.0%
Rate (Seas. Adj.)**	11.0%	9.4%	12.4%	10.0%	16.1%	7.1%	26.1%
Total Employment	4,825	34,950	24,075	35,150	10,075	39,850	44,975

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

	La Paz	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
TOTAL WAGE AND SALARY	3,975	27,750	21,850	31,875	11,250	30,050	29,825
Manufacturing	250	2,550	1,950	3,800	1,025	2,500	2,200
Mining & Quarrying	75	50	1,225	4,225	25	1,025	50
Construction	300	2,625	825	425	325	2,575	1,400
T.C.P.U.	150	1,300	1,600	1,100	800	1,050	1,100
Trade	1,350	8,075	4,375	5,650	5,050	8,075	9,125
F.I.R.E.	100	1,375	450	750	275	950	1,025
Services & Misc.	750	7,100	4,975	5,200	1,900	7,450	6,400
Government	1,000	4,675	6,450	10,725	1,850	6,425	8,525

* Adjusted to the Current Population Survey (CPS) to reflect place of residence.

** Seasonal adjustment not applicable for economic assistance programs.

T.C.P.U. = Transportation, Communications, and Public Utilities

F.I.R.E. = Finance, Insurance, and Real Estate

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Estimated Hours and Earnings of Production Workers in Selected Industries
Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Nov.* 1991	Oct.** 1991	Nov. 1990	Nov.* 1991	Oct.** 1991	Nov. 1990	Nov.* 1991	Oct.** 1991	Nov. 1990
Manufacturing	$446.20	$440.23	$424.04	41.2	40.6	40.5	10.83	10.79	10.47
Aircraft & Missiles	668.95	643.68	682.48	45.6	44.3	47.1	14.67	14.53	14.49
Food & Kindred Prod.	335.29	335.89	343.66	39.4	38.3	38.1	8.51	8.77	9.02
Primary Metals	492.43	508.93	524.49	40.1	40.2	38.2	12.28	12.66	13.73
Machinery	455.80	438.74	385.39	41.1	40.4	38.5	11.07	10.86	10.01
Copper Mining	652.44	653.67	624.70	43.7	43.9	43.9	14.93	14.89	14.23
Construction	450.55	449.84	442.01	36.9	37.3	37.3	12.21	12.06	11.85
Utilities	767.65	783.98	721.01	42.6	43.7	43.2	18.02	17.94	16.69
Retail Trade**	271.89	271.25	253.12	32.1	32.1	32.0	8.47	8.45	7.91
Wholesale Trade	414.85	414.58	400.28	38.2	38.0	38.6	10.86	10.91	10.37

Estimated Hours and Earnings of Production Workers in Selected Industries
Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Nov.* 1991	Oct.** 1991	Nov. 1990	Nov.* 1991	Oct.** 1991	Nov. 1990	Nov.* 1991	Oct.** 1991	Nov. 1990
Manufacturing	$464.20	$456.35	$466.05	42.2	41.6	42.1	11.00	10.97	11.07
Construction	467.60	466.35	470.40	37.2	37.7	38.4	12.57	12.37	12.25
Retail Trade**	289.71	287.10	265.85	33.3	33.0	32.7	8.70	8.70	8.13
Wholesale Trade	431.73	428.07	424.60	39.0	38.6	38.6	11.07	11.09	11.00

Estimated Hours and Earnings of Production Workers in Selected Industries
Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Nov.* 1991	Oct.** 1991	Nov. 1990	Nov.* 1991	Oct.** 1991	Nov. 1990	Nov.* 1991	Oct.** 1991	Nov. 1990
Manufacturing	$419.45	$420.21	$377.64	40.1	40.6	38.3	10.46	10.35	9.86
Construction	394.58	396.01	384.82	36.4	36.6	35.5	10.84	10.82	10.84
Utilities	643.72	645.52	640.01	41.8	41.3	41.0	15.40	15.63	15.61

* Preliminary.

** Revised

*** Excludes eating and drinking places.

Note: These estimates are based on a sample of full- and part-time production and related employees whose payroll and hours are reported for the pay period which includes the 12th of the month.
Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Arizona Labor Force and Employment for Economic Assistance Programs November 1991

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,733,144	1,614,987	118,157	6.8%
Apache	15,801	13,603	2,198	13.9
Cochise	35,232	32,378	2,854	8.1
Coconino	45,034	41,421	3,613	8.0
Gila	13,447	11,910	1,537	11.4
Graham	8,523	7,814	709	8.3
Greenlee	3,485	3,229	256	7.3
La Paz	5,452	4,833	619	11.4
Maricopa	1,069,092	1,004,908	64,184	6.0
Mohave	38,569	34,958	3,611	9.4
Navajo	27,019	24,073	2,946	10.9
Pima	322,426	305,810	16,616	5.2
Pinal	38,779	35,157	3,622	9.3
Santa Cruz	12,072	10,075	1,997	16.5
Yavapai	42,712	39,855	2,857	6.7
Yuma	55,503	44,965	10,538	19.0

These figures are the only official BLS labor statistics to be used for revenue sharingpurposes. They are not designed to be used as economic indicators.

NOTE: Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

Labor Force

(Continued from page 7)

which lost 100 jobs in November, experienced its third straight monthly decline in employment. The finance sector is responsible for all of the monthly loss as well as all of the over-the-year decline (900) in FIRE employment.

Services, which lost 900 jobs, experienced its first November employment decline in more than 10 years and only the second November drop in the last 25 years. Business services, which includes temporary-help firms, had the largest loss (not good news for a struggling economy) followed by amusement and recreation services, professional services, auto repair services, agricultural services, legal services, and educational services. Hotels and other lodging places, health services, personal services, and the catchall category of miscellaneous services all showed modest gains in November.

Manufacturing employment was down 1,000 in November with durable-goods industries losing 700 positions and non-durable-goods industries down 300. Manufacturing employment has shown growth in only two months in 1991, June and August. Statewide, two sectors have accounted for the bulk of the over-the-year losses in manufacturing — aircraft and missiles, and machinery manufacturing.

In summary, while the Arizona economy created jobs in November, the number of people entering the state's labor force grew even faster, causing a significant rise in the seasonally adjusted unemployment rate to the highest level in five years. And while the number of jobs grew last month, it appears a large part of the non-farm payroll employment increase was due to a rise in part-time jobs and multiple job-holders — particularly in Maricopa County — a normal occurrence for this time of year. Finally, weakness in trade employment over the last two months and November's discouraging services employment figures should be reason to view the future cautiously.

—Dennis Doby,
RA Economist

Thrift Jobs

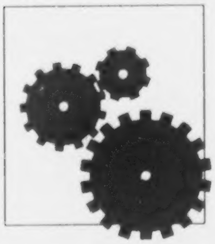
(Continued from page 6)

7. Prediction by the management consulting firm of Cresap, as reported in *USA Today*, Dec. 30, 1991, p. B2.

8. Bank of America, which plans to employ more than 1,000 workers at a credit-card operation in Phoenix, has yet to say what will happen to Security Pacific's credit-card operation in Arizona if the merger goes through.

McDonnell Douglas to Lay Off 800 to 1,000 in '92; Glendale Picks Up RV Plant

"New Developments" is featured each month as a service to our readers. This section is a compilation of public announcements and articles from newspapers and periodicals about events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of business news is not possible. In addition, the *Arizona LMI Newsletter* *is not responsible for incorrect information reported by these sources.*



MANUFACTURING — McDonnell Douglas Helicopter Co. announced in December plans to eliminate 800 to 1,000 jobs at its Mesa facility in 1992 due to restructuring, a poor global economy, declining production of the Apache attack helicopter, and reduced defense spending. The job cutbacks — which will be accomplished through attrition, layoffs, and the completion of contracts — follow other employee reductions over the past three years and will bring employment to around 4,200, about half of what it was several years ago.

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Fleetwood Enterprises Inc., the nation's largest producer of recreational vehicles and mobile homes, was expected in January to open a manufactured-housing plant in Glendale that would employ 150 people and have an annual payroll of $4 million. Based in Riverside, Calif., Fleetwood employs 11,000 workers at 41 plants in the United States and Canada. The Glendale operation will be located in the 6000 block of N. 56th Avenue.

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Eaton Corp. of Cleveland is moving the operations of a plant that makes electrical switchboards and panelboards from Los Angeles to Prescott. Eaton's 50,000-square-foot facility, which will do custom work and piecework, is expected to open in June and employ 60 workers, almost all from the local area. The median wage of employees is expected to be around $10 an hour.

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Work at a new plant in Mesa that will make explosive devices used for inflating airbags was scheduled to begin in January. Employment at Special Devices Inc.'s $14 million, 43,000-square-foot facility is expected to grow to 150 by 1993 when two production lines are in complete operation. Special Devices, based in Southern California, has a contract to make devices called "airbag initiators" for TRW Inc.'s airbag-manufacturing operation in Mesa.

—

Intel Corp.'s Chandler campus is becoming the home of the high-tech company's new i960 microprocessor group, which will eventually add 200 employees to the East Valley location's workforce of 3,600. About one-half of the needed workers — primarily integrated-circuit designers — were on staff or had been hired as of early December. Chandler's good fortune came about as part of an Intel restructuring plan, which consolidated the company's 960 operations into one location, rather than splitting them between several sites in Chandler and Oregon.

—

The small northern Arizona town of Fredonia, which has been hurt by layoffs at Kaibab Forest Products' sawmill, will get a shot in the arm when a maker of manufactured homes and commercial buildings moves to the area in the near future. Automated Building Corp. expects to employ about 100 workers at a plant at an undetermined site between Fredonia and Kanab, Utah, which is a few miles across the Arizona border.

—

Newly formed Forest Energy Corp. plans to open a plant in Show Low sometime in 1992 that will make wood pellets used for pellet-burning stoves. The facility, which will be near the Show Low Airport, is expected to create about 20 full-time jobs.

CONSTRUCTION — Homes by Dave Brown, a Valley homebuilder, plans to open eight new single-family residential communities in the Phoenix area by the end of 1992. The subdivisions, which will each include 80 to 100 lots, will be located in the northwest and southeast portions of the Valley. Homes by Dave Brown also builds homes in Bullhead City and Las Vegas.

—

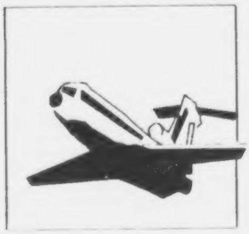
Work is set to begin in March on The Groves Power Center in Tempe, which will include a 65,000-square-foot Phar-Mor drug store and 14,000 square feet of retail space. The "power center," which will also feature a major grocery store and movie theaters, will be located at Priest and Elliot roads and is part of a 78-acre mixed-use project, The Groves, which includes retail, residential, and industrial development.

—

A $6 million renovation of the Marcus J. Lawrence Memorial Hospital in Cottonwood has been awarded to Kitchell Contractors Inc. The project, which will get under way in March, will include remodeling of 50,000 square feet of the 99-bed facility, as well as construction of two new buildings (including a new patient wing) totaling 22,000 square feet. Kitchell is currently working on several other hospital-renovation/expansion projects in Kingman and Tucson.

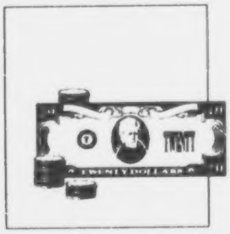
—

Gosnell Builders, known for its development of The Pointe resorts, is ready to co-develop the Camelhead shopping and residential complex at the current location of Thomas Mall in Phoenix, 44th Street and Thomas Road. Gosnell will finance the building of office and housing projects, while Homart Community Centers Inc. will provide funding for 450,000 square feet of retail space on 37 of Camelhead's 66 acres. Construction could begin as early as mid-1992.



TRANSPORTATION, COMMUNICATIONS and PUBLIC UTILITIES — Despite turbulent times for the airline industry, a Tucson-based air carrier expects to raise $3 million in operating capital necessary to get the airline off the ground and into the skies by May. Arizona Airways, which plans to initially fly 30-passenger prop-jets to Albuquerque, San Diego, and Orange County, Calif., says it expects the airline to directly and indirectly create 165 jobs in its first year of operation and 395 jobs within five years. The fledgling airline, which will initially hire 50 people, also plans to fly to cities in northern Mexico and stands to benefit if Congress approves a free-trade agreement.

An undetermined number of U S West Communications' employees in Arizona will lose their jobs in the near future as part of a 10 percent reduction (6,000 workers) in the company's 14-state workforce. About 25 managers of crews that install and repair telephones in Tucson recently learned their jobs are being eliminated. About 6,500 Arizonans work for U S West.



FINANCE, INSURANCE AND REAL ESTATE — A private New York stock exchange, Wunsch Auction Systems Inc., received final approval in December from the Arizona Corporation Commission to become the state's first stock exchange. Wunsch, which will change its name to the Arizona Stock Exchange Inc., is expected to begin operations in February with two employees. Last June, the state Legislature approved a bill that called for a feasibility study of an Arizona stock exchange (see *Arizona LMI Newsletter*, August 1991), which would be used partly to help Arizona companies raise capital through public offerings.

TRADE — About 100 employees at McCrory Co. stores in the Phoenix area will be laid off by the end of January as part of a nationwide restructuring plan by the Pennsylvania-based retailer. McCrory Co., which owns a variety of five-and-dime chains, is closing seven JJ Newberry stores and one McCrory's in the Valley. About 230 McCrory-owned stores will be closed across the country.

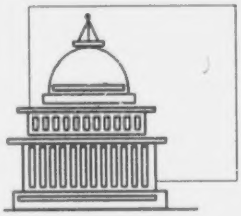
Mesa-based Mega Foods Stores Inc. plans to open its first bag-it-yourself supermarket in Flagstaff, possibly as early as April. Mega Foods will remodel the vacant 68,000-square-foot K mart building at 2530 N. Fourth Street. K mart is moving into a new store in west Flagstaff near Woodlands Village Plaza. No information on potential employment was available.

Expansion work for K Mart's store in Kingman will be completed by April. The store will then increase its current workforce of 140 by about 10 to 12 percent. Meanwhile, construction is under way on a 114,000-square-foot K mart in Prescott Valley that it is expected to open in late summer or early fall. The store will employ about 150 people and include a Little Caesar's pizza restaurant in place of K mart's regular restaurant. K mart is opening Little Caesar's in 400 of its stores across the country.

SERVICES — The opening in March of Arizona's first Joe Weider Fitness Gym should pump additional life into the Foothills Park Place Shopping Center, Interstate 10 and Ray Road in Chandler, say developers of the retail center. The 14,000-square-foot facility, which will feature a juice bar, pro shop, and day-care center, will employ between 30 and 35 people who will be required to be certified by a Weider training program. Weider, who heads a multi-million dollar, health-product and fitness-publishing company, began franchising his gyms a few years ago.

Expansion of the Kingman Regional Medical Center (see *Arizona LMI Newsletter*, September 1991) is helping attract physicians. Five specialists — including a cardiologist, anesthesiologist, and emergency-room physician — were hired in 1991 and five to 10 more will be brought in this year, says a hospital official.

The Yuma County Hospital District has requested a permit from the state to build an obstetrics and pediatrics facility at the Yuma Regional Medical Center. The $15 million project, which would include a two-story building and renovation of existing operations, is expected to open in early 1994 and create the equivalent of 29 full-time positions, primarily nurses.



GOVERNMENT — Although somewhat behind schedule, training of employees for a new U.S. Census Bureau telephone-survey center in Tucson should begin sometime in March with an expected operational timeframe of mid-1992. The 10,000-square-foot facility near Tucson International Airport — which will collect data on topics such as employment and housing — is expected to employ 250 intermittent and part-time interviewers and 25 supervisors. Non-supervisory jobs will pay about $6.25 an hour and all but a handful of the facility's jobs will be hired locally.

NEWS IN BRIEF

Congress Extends Tax-Credit Program That Targets Disadvantaged Workers

Following are brief stories relating to labor issues affecting the nation and Arizona.

Before adjourning in late November, Congress extended the Targeted Jobs Tax Credit (TJTC) program through June 30, 1992. The TJTC program, which offers employers tax credits for hiring disadvantaged persons in nine target groups, was one of 12 tax credits due to expire Dec. 31.

The TJTC program, along with the other tax credits, will be funded by increasing tax payments of corporations that estimate their tax liability and file quarterly. Companies that have income of $1 million or more a year will have to pay at least 95 percent of their actual tax liability, compared to the current requirement of 90 percent. The change will raise about $3 billion.

Although temporary funding was approved for TJTC, the program's effectiveness has diminished in recent years because of threats of elimination, according to Terrie Dort, an official with a government-relations consulting company. In a recent issue of *Employment & Training Reporter*, a weekly periodical that covers federal employment and training issues, Dort said the continued threat of program extinction, which has dogged the program since its inception in 1978, discourages employers from using the tax credit to hire disadvantaged workers.

However, Congress is expected this year to discontinue the process of temporarily funding programs like TJTC, Dort told the periodical. According to Dort, House Ways and Means Chairman Dan Rostenkowski has announced plans to consider all 12 tax provisions separately. "Viable provisions will be made permanent; others will be eliminated," *Employment & Training Reporter* said.

The TJTC program allows employers to claim a credit of 40 percent of an employee's first-year wages up to $6,000, or a maximum credit of $2,400 per employee. In addition, employers can claim a credit of 40 percent of a worker's wages up to $3,000, or a maximum credit of $1,200, for economically disadvantaged summer youth workers hired between May 1 and September 15.

Some of the groups the TJTC program targets are:

- people with disabilities referred from vocational-rehabilitation programs of either a state or the U.S. Department of Veterans Affairs.
- economically disadvantaged Vietnam-era veterans.
- economically disadvantaged youth ages 18 to 22, or youth ages 16 to 19 that participate in qualified cooperative-education programs.
- recipients of federal Supplemental Security Income (SSI), or people who have received for at least 30 days state and local general assistance payments.

Additional information is available about the TJTC program by contacting an Arizona Department of Economic Security (DES) Job Service office.

DOL Report Focuses on Learning Disabled

The U.S. Labor Department has released a new study on the learning disabled, aimed at helping those involved in employment and training programs — such as the Job Training Partnership Act (JTPA) — properly determine the needs of this segment of the population.

The study, "The Learning Disabled in Employment and Training Programs," looks at the differences between functional illiteracy and learning disabilities, tools that can be used to assess learning problems, and methods of providing basic and occupational-skills instruction to the learning disabled. The report also offers a list of studies related to learning disabilities and resources for providing instruction to the target group. The Urban Institute, a Washington D.C. think tank, conducted the study for DOL's Employment and Training Administration,

A limited number of copies of the study are available at no cost by writing the Employment and Training Administration's Dissemination Unit, Room N5637, 200 Constitution Ave., N.W., Washington D.C.; or calling (202) 535-0664.

Revised *DOT* Offers 2,000 New, Changed Job Categories

Looking for a new occupation for yourself or somebody else? Consider consulting the revised Fourth Edition of the *Dictionary of Occupational Titles (DOT)*, which features about 2,000 new or changed occupational categories — primarily reflecting changing technology and skill requirements — new indexes, and a new two-volume format.

Produced by DOL's Employment and Training Administration, the *DOT* "is the most comprehensive single source of information about jobs in the United States ... and offers a starting place for required training, education, career guidance, employment counseling, job definition and wage restructuring," says Robert Jones, Assistant Secretary for Employment and Training.

Copies of the dictionary are available for $40 by writing or calling the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402-9325; telephone: (202) 783-3238.

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ARIZONA LABOR MARKET INFORMATION NEWSLETTER

Vol. XVI No. 2
February 1992

Unemployment Rate

Seasonally Adjusted
December 1991*

ARIZONA	–	8.6%
Maricopa Co.	–	7.4
Pima Co.	–	5.7
United States	–	7.1

Consumer Price Index

U.S. – December 1991
Base = 1982-84

Wage Earner/Clerical Worker	–	135.9
% Chg. Year Ago	–	2.8
All Urban	–	137.9
% Chg. Year Ago	–	3.1

Phoenix – 4th Qtr 1991
Base = 1982-84

All Urban	–	138.4
% Chg. Year Ago	–	2.3

Tucson CPI No Longer Available (see May 1991 *Arizona LMI Newsletter*

* Preliminary

2000

On the Edge of the 21st Century

DES Report Offers Snapshot of Arizona Labor Market by End of Decade

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Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

Study: Overall Mix of State's Workers to Change Little in '90s

But Minorities, Women, Older Workers Expected to Gain Larger Shares of New Jobs

Last November, in conjuction with a statewide conference on employment and training issues, the Department of Economic Security's Research Administration issued a forecast of labor force, employment, and occupational trends through the year 2000. The goal of the conference and report was to give a glimpse at the expected makeup of Arizona's economy by 2000 to those involved in planning and public-policy making activities — such as vocational-education planners, economic-development officials, and employers.

The report, "On the Edge of the 21st Century: A Forecast and Analysis of Arizona Labor Market Trends Through the Year 2000," looked at a variety of issues that will affect Arizona's workforce and industry through this decade. Among these are: expected population growth by race/ethnicity, age, and sex; occupation, labor force, and employment growth and makeup by race/ethnicity, age, and sex; foreign trade — specifically with Mexico — and its effects on state employment; the cycle of low-wage jobs/industry in Arizona and its relationship to the state's migrational patterns; and the rapid growth of female-headed, single-parent households in Arizona.

Although less intensive in scope, the Arizona study is similar in nature to a national "Workforce 2000" produced by the Hudson Institute for the U.S. Department of Labor in 1987.[1] That study has been used as a benchmark by national, state, and local organizations for developing long-term education and training strategies and policies. (National data used in that report has now been updated for the period covering 1990 to 2005; see related story on this page.)

The Hudson Institute report, however, offers only limited insight into state and local labor market trends — and therefore the need for a statewide study. In addition, the Arizona report disagrees with — and does not take into account — one of the major assumptions of the "Workforce 2000" study: that a slowly growing U.S. labor force between 1985 and 2000 will create a shortage of professional and technical workers and an oversupply of low-skilled workers, or a skills mismatch, at a time when skill levels will need to dramatically increase.

Instead, the Arizona study, which was researched and authored by University of Arizona professor Arthur L. Silvers, accepts the view of a recently released report by the Economic Policy Institute. That report says no skills mismatch will occur by 2000 because it expects only a slight shift in the nation's occupational structure and a *slowdown* in the upgrading of skills.[2]

Another major distinction between the Arizona and "Workforce 2000" studies is that the U.S. report offers three possible scenarios for economic growth — low, moderate, and high — while the Arizona report offers just one. Since the Arizona study was completed much closer to the year 2000, there is less need for multiple forecasts.

Several sources of data were used extensively to create the Arizona 2000 report: 1) studies of demographic composition and change produced population projections and, therefrom, state labor force forecasts; 2) an amalgamation of several economic projections produced an intermediate-term economic forecast, and therefrom, employment estimates; 3) the 1980 census and limited available data from the 1990 census helped develop occupational and economic well-being trends; and 4) studies and forecasts from several public-sector studies were used to look at the effects of foreign trade and international migration on Arizona's economy.

Following are some of the major findings

BLS Updates Job Estimates Through 2005

The U.S. Department of Labor's Bureau of Labor Statistics (BLS) has updated its economic and employment projections to the year 2005. The projections, the Bureau's 18th in a biennial series dating back to 1957, are widely used in studying long-range economic and employment trends and are the basis for career information developed in the Bureau's occupational-outlook program.

The projections offer three alternative scenarios — low, moderate, and high — of changes in the labor force, economic growth, and employment by industry and occupation. Each projection scenario employs a specific set of assumptions, including factors such as fiscal policy, monetary policy, demographic changes in population, foreign exchange rates, and unemployment.

Projected employment growth from 1990 to 2005 varies widely among the three outlooks: 14 million in the low-growth scenario, 25 million in the moderate-growth situation, and 32 million in the high-growth scenario. Projected annual real GNP growth under these scenarios are 1.5 percent, 2.3 percent, and 2.9 percent, respectively.

Following are highlights of the moderate-growth scenario.

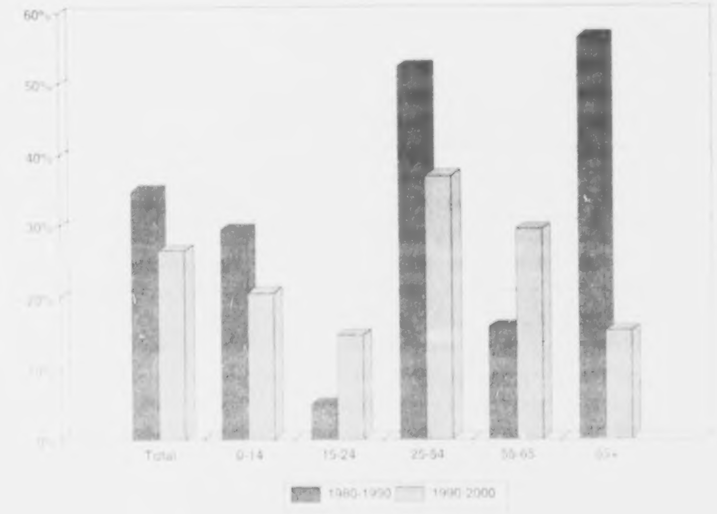
Labor Force:

- Mainly because of slower growth in the population age 16 and over, BLS projects the annual growth rate for the labor force from 1990 to 2005 to be 1.3 percent, down from 1.9 percent in the previous

(Continued on page 12)

of the Arizona study, broken out by the report's four major sections:

Figure 1. Arizona Age-Cohort Growth Rates, 1980-1990 and Projected 1990-2000



Sources: *U.S. Census of Population, 1980, 1990; Arizona Department of Economic Security, Research Administration, Population Statistics Unit, July 1991; and Mountain West Research, June 1989*

Demographic Trends:

- The state's population should increase from 3.67 million in 1990 to 4.64 million in 2000, or grow at an annual rate of 2.4 percent. While the growth rate this decade should be considerably slower than during the 1980s (3 percent), it should still outdistance the rest of the nation, expected to grow at an annual clip of 0.8 percent.

- There should be major shifts (10 percent or higher) this decade in growth-rate patterns among all age groups; fastest growing age groups will be 15-24 and 55-64, while groups expected to show a sharp drop in growth are 0-14, 25-54, and 65+. While these changes will not dramatically affect the state's overall age-profile distribution, they will likely require targeting of training for different age groups (e.g., older adults will need more training to offset the expected shortage of younger labor force entrants).

- Arizona's largest minority groups will grow faster than whites during the decade, but overall these groups' share of population in 2000 will be quite similar to their share in 1990. The biggest changes will come from Hispanics, who will account for 31 percent of the state's growth and increase their overall share 2.5 percentage points to 21.3 percent; and whites, who will contribute 55.1 percent of population growth and see their share of population drop more than 3 percentage points to 67.8 percent.

- Population growth due to net migration should slow somewhat this decade — from 68.2% to 65.3% — but migration patterns in 2000 among race/ethnic groups are expected to be similar to 1990, except for Asians, who should see a drop of 10 percent. Whites, however, should continue to account for most of the state's net migration, while blacks and Hispanics will continue to have Arizona's fastest rates of natural increase.

- Arizona's migrational patterns are in part a reflection of the state's pattern of economic development: much of industry's needs for less-skilled and lower-wage labor has been disproportionately supplied by the state's resident population — principally minorities — while the need for workers with more advanced skills and education have been drawn primarily from migrating whites. The need for broad and unpredictable skills, along with inadequate training for local residents, are two major reasons for this pattern.

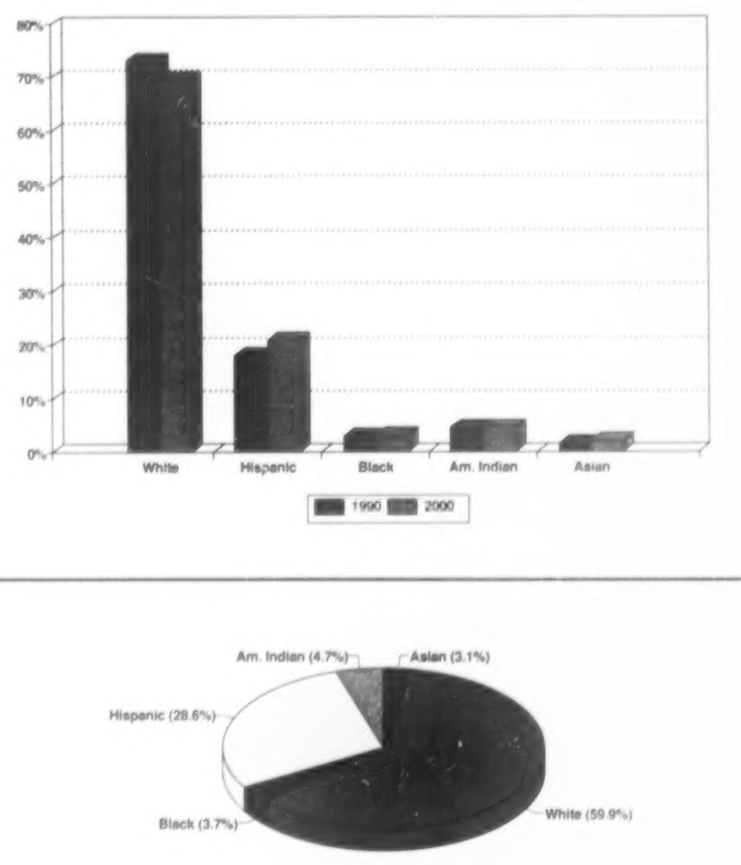
- Based on data from the U.S. Census Bureau and the U.S. Immigration and Naturalization Service (INS), international migration did not appear to have played a major role in population growth last decade in Arizona, nor is it likely to during the 1990s. However, lack of INS data on undocumented aliens — particularly political refugees from Central America during the mid-'80s — makes it difficult to give a definative statement on international migration.

Labor Force:

- Following a national trend, the female share of Arizona's workforce should rise slightly — 45.3 percent in 2000 vs. 43.4 percent in 1990 — as gains in participation rates are expected for all female age groups, except for the oldest working group (65+). Male participation rates by age group should remain about the same.

- As a group, minorities should see their share of Arizona's labor force growth this decade greatly surpass their share of the overall labor force in 1990 (40 percent vs. 28 percent), but the race/ethnic makeup of the state's overall labor force should be little changed between 1990 and 2000. The greatest group changes will occur with whites and Hispanics: the former will see its share of the labor force drop from about 73 percent to 70 percent; the latter's share should increase from around 18 percent to 21 percent.

Figure 2. **Percent Share of Arizona Labor Force by Race/Ethnic Group, 1990 and Projected 2000 (Top); and Percent Share of Arizona Labor Force Growth by Race/Ethnic Group, 1990-Projected 2000**



Source: *Estimates by L.E. Frankel and A.L. Silvers based upon adjusted labor force participation rates from U.S. Department of Labor, Bureau of Labor Statistics, 1989*

- As will be the case nationally, slow growth in Arizona's youngest working-age group (15-24) will create a shortage of entry-level workers and growing opportunities for women, minorities, and older workers; the state's youngest working-age group is projected to only grow at an annual rate of 1.9 percent this decade, compared to 3.2 percent for the 25-54 group. This phenonmenon may help to improve wages for and reduce discrimination against minority groups and women.

- Because income data from the 1990 census were not available at the time of this study, projections for the economic well-being of family groups by gender and race/ethnicity were difficult to make. However, 1990 census data did show that in Arizona over the last decade, households with children that were headed by single females — a group that tends to have higher incidences of poverty — increased its share of all households from 15.6 percent to 20.1 percent. Blacks and American Indians showed the highest incidences of this family makeup.

Job Market:

- The industrial makeup of Arizona and the nation as a whole — which for years were quite dissimilar — should move closer together during this decade. Because of that the U.S. economy will play a larger role in determining the state's employment and occupational growth rates.

- Arizona's total civilian employment — which includes self-employed, agricultural, and household workers, as well as non-farm wage and salary workers — should increase about 45 percent to 2.36 million between 1990 to 2000. Among major industry groups, the finance, insurance, and real estate (FIRE) and services sectors are expected to produce one of every two new non-farm payroll jobs. Also, following a national trend, the goods-producing sectors — manufacturing, construction, and mining — should continue to lose their share of non-farm wage and salary jobs in Arizona, dropping 1 percentage point by 2000 to 17.8 percent.

- Forty-three percent of the 720,000 new civilian jobs expected in Arizona by 2000 will be in the lower-wage, major occupational groups of service, laborer, and clerical, or about 3 percentage points above those groups' share of the state's occuapational mix in 1990; the high-skilled, blue-collar category of crafts and precision-production will increase its share of occupational employment about 1.5 percentage points, while the professional category should see its share drop about 1 percentage; all other groups should each have share losses under 1 percentage point.

- Based on data from the Economic Policy Institute report and the state's expected occupational mix, an upgrading of skills across and within occupations should only be slight between 1990 and 2000. On the other hand, a continued shift from goods-producing to service-producing jobs should hold down overall wage gains in Arizona this decade and narrow the wage differential between the goods-producing and service-producing sectors.
- Foreign trade will play a small, but gradually increasing role in Arizona's economy; foreign trade directly accouted for 4 percent (61,800 jobs) of the state's total employment in 1989 (with the multiplier affect, 6.6 percent or 106,000 jobs). Mexico accounted for about 20,000 jobs in 1989 and, based on its growth pattern, could account for another 12,500 by 2000. Job growth from a future free-trade agreement with Mexico, however, is not expected to supply more than 3,500 jobs for Arizona this decade.

Policy Implications:

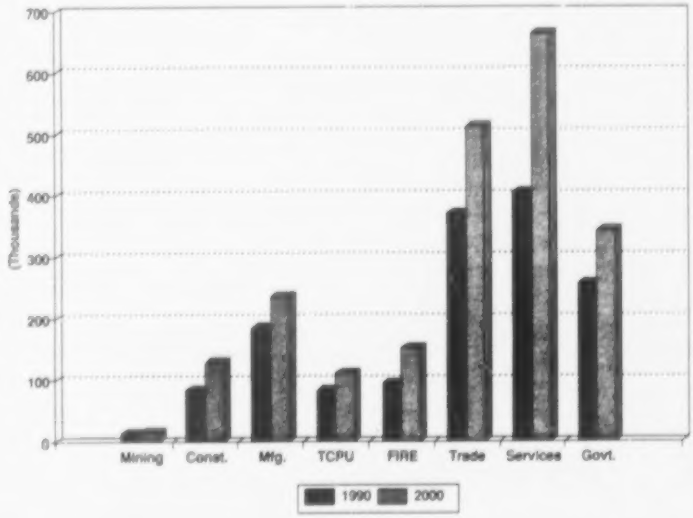
- Although little skills upgrading across and within industries is expected this decade in Arizona, the state will need to upgrade the skill level of its workforce if it wants to attact higher-paying jobs from out of state and offer a more productive workforce for existing companies. However, skills-training programs will need to be targeted for jobs that will materialize; and projected shifts in growth patterns by age, gender, and race/ethnicity will demand that resources be appropriately allocated.
- Although the cycle of low-wage in-

Table 1. **Top 15 Industries in Arizona, Ranked by Largest Growth in Wage and Salary Employment, 1990-Projected 2000**

Industry	New Jobs	Pct. Inc.
Business Services	97,300	78.5%
Health Services	48,400	46.3
Eating, Drinking Places	46,000	43.5
Schools	45,000	38.4
Real Estate	34,000	35.0
Construction	24,400	20.3
Hotels and Motels	20,600	47.0
Agricultural Services	15,500	55.5
Insurance	12,800	39.0
Transportation Equipment	11,500	42.6
Auto Repair	9,800	40.8
Legal Services	8,900	52.7
Air Transportation	7,200	42.6
Printing and Publishing	6,800	37.0
Investments	3,900	41.1

Sources: *Estimates by A.L. Silvers and L.E. Frankel based upon data from Economic Forecasting Project, Division of Economic and Business Research, University of Arizona; and "BEA Regional Projections to 2040," Vol. 1: States, U.S. Dept. of Commerce, Bureau of Economic Analysis, June 1990*

Figure 3. **Arizona Wage and Salary Employment by Industry, 1990 and Projected 2000**



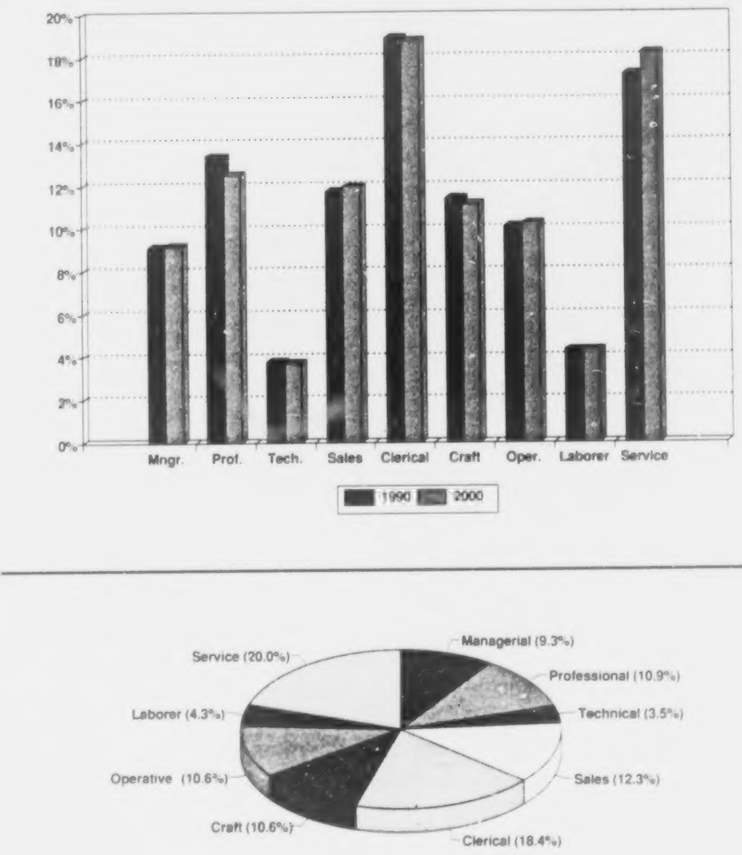
Sources: *1990 data: Arizona Dept. of Economic Security, Research Administration, January 1991; 2000 data: same as Table 1* dustry in Arizona is likely to continue this decade, the state can take several steps to change this trend. Among these are: making a sizable investment in skills upgrading and educational attainment for the resident population, particularly growing minority groups; utilizing a variety of educational settings (e.g., universities, community colleges, and vocational-education) to provide a well-trained and varied workforce; and targeting and nurturing emerging and growing industries (e.g., health science and optics).

- While an increased demand this decade for entry-level workers is expected to somewhat ameliorate discriminatory practices and poverty for large segments of the workforce in Arizona and the nation, several other issues designed to open up the workplace are expected to command center stage. Among these are: the availablity of child care, particularly for single-parent families who cannot afford to work and child-care expenses; health care benefits for the estimated 500,000 working Arizonans who are without insurance; and promoting policies that open up the workplace to a wider variety of individuals (e.g., mentally and physically handicapped and older workers).
- Although Arizona should continue to benefit — in terms of employment and trade — from an expanding Mexican economy, the state could do more over the near-term to capitalize on its cultural and geographic ties with all Latin American countries. This includes: encouraging more people to learn Spanish; improving and heightening interest in international business and education at its universities; and improving transportation (e.g., rail, highway) infrastructure at the Mexican border to smooth movement of goods.

A limited number of copies of the Arizona study are available at no charge by contacting DES, Research Administration; call (602) 542-3871.

—DES, Research Administration

Figure 4. **Percent Share of Arizona Jobs by Major Occupational Group, 1990 and Projected 2000 (Top); and Percent Share of New Arizona Jobs by Major Occupational Group, 1990-Projected 2000 (Bottom)**



Source: Estimates by L.E. Frankel and A.L. Silvers based upon adjusted labor force participation rates from U.S. Department of Labor, Bureau of Labor Statistics, 1989

Notes:

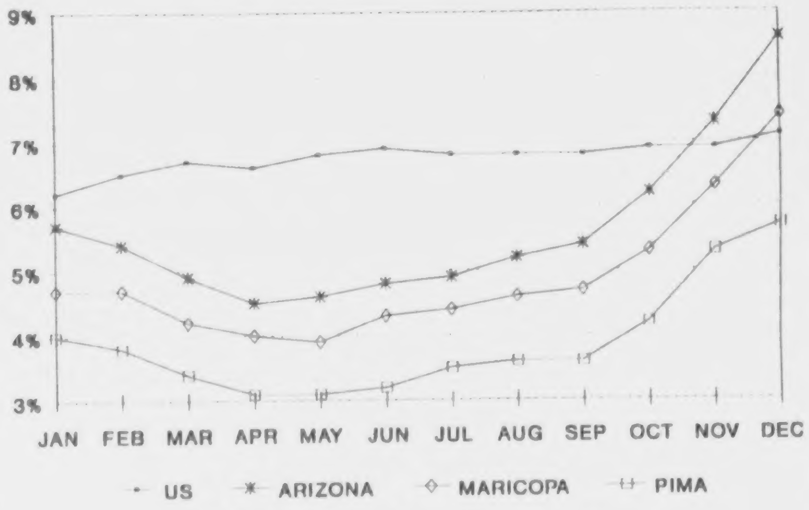
1. "Workforce 2000: Work and Workers for the 21st Century," William B. Johnston and Arnold E. Packer, Hudson Institute, June 1987, pp. 98-101.
2. "The Myth of the Coming Labor Shortage: Jobs, Skills, and Incomes of America's Workforce 2000," Lawrence Mishel and Ruy A. Teixeira, Economic Policy Institute, 1991, pp. 1-34.

Job Forecast in March Issue

DES, Research Administration's annual two-year employment forecast for Arizona, its two major metropolitan areas, and the non-metropolitan counties as a whole will be published in the March *Arizona LMI Newsletter*.

The Arizona Labor Force in December

Figure 1. **U.S., Arizona, Maricopa County, and Pima County Unemployment Rates (Seasonally Adjusted), January 1991-December 1991**



Source: U.S. Department of Labor, Bureau of Labor Statistics; and Arizona Department of Economic Security, Research Administration, January 1992

Arizona's seasonally adjusted unemployment rate soared to 8.6 percent in December, up from 7.3 percent in November and its highest level since August 1983. The 1.3 percentage-point rise was the largest single monthly gain in Arizona's rate since a 1.5 percentage-point rise in February of the recessionary year of 1975. And the 3.2 percentage-point rise since September is the steepest three-month climb in the state since seasonal adjusting began in 1963.

Three factors sent the rate soaring in December: 1) 14,800 more people joined the ranks of the unemployed last month when an 800 gain has been average for the month over the last decade; 2) total employment declined 19,100 when an average gain of 2,600 has occurred in December the last 10 years; 3) the labor force shrunk 4,300 when on average it grows 3,400 in December.

Unemployment ballooned because new job seekers and re-entrants poured into the labor market at record rates. Perhaps loss of jobs by primary breadwinners sent spouses and older children into the market before Christmas to help close the family income deficit. However, seasonal jobs were not available in usual numbers, because merchants were anticipating a weak holiday season and were restrained in staffing-up. A total of 133,400 Arizonans were unemployed in December.

Total employment — which includes wage and salary employees, as well as the self-employed and agricultural workers -- was down for the year ending in December for the first time since 1982. Over the year (December to December) there were 45,800 fewer employed in Arizona, bringing total employment down to 1,597,000. The self-employed category suffered the most radical losses last month, declining more than three times than normal for December (18,000 loss vs. an average loss of 4,900).

December retail trade job growth was weaker than in the recessionary year of 1982. Retail trade added 4,100 jobs for the month, an increase of 1.3 percent, while it gained 4,800 jobs, or 1.9 percent, in December 1982. Weakness in retail trade was concentrated in the subindustries of food stores, and restaurants and bars, which added only 200 and 100 jobs, respectively, when each normally posts gains of 800 in December. This may be indication as much that tourism was down as that it was a weak Christmas sales season.

Adding to the possibility of weak tourism were job losses of 400 by hotels and lodging services. On average, lodging-services employment is stable in December. In addition, health services (up 300) posted less than half its average December gains (700). Health services are dependent on the influx of winter migrants and tourists to support normal upward-staffing.

One more thorn in tourism's winter crown was stabbed by the transportation industry, which added 400 jobs, little more than half normal. December's weak gain took the shine off November's greater-than-seasonal gain (600 when 400 is average). .

All other major industry groups in Arizona, except mining, had monthly job losses in December. Manufacturing overall lost 200 jobs, propelled by a 300 drop in the aircraft and missiles sector. Construction was down another 1,400 — a more than seasonal decline — despite 25-year low interest rates. Finance, insurance, and real estate (FIRE) lost 200 jobs, all in the savings institution components of finance. And government lost a greater-than-seasonal 1,100 jobs, but losses were more than seasonal only because some state fair employment was still being counted in November.

Maricopa County's unemployment rate rose to 7.4 percent in December from 6.3 percent in November, while Pima County's unemployment rate climbed to 5.7 percent in December from 5.3 percent in November. All non-metropolitan counties posted unemployment rate increases in December. Yuma County had the highest seasonally adjusted rate at 30.9 percent. Eight counties had double-digit rates.

—Ron Simon,
RA Economic Analysis Manager

Arizona Labor Force and Employment

December 1991 (in Thousands)

	ARIZONA					MARICOPA COUNTY					PIMA COUNTY				
				AMOUNT CHANGE					AMOUNT CHANGE					AMOUNT CHANGE	
	Dec.* 1991	Nov.** 1991	Dec. 1990	Nov. - Dec.	1990 - 1991	Dec.* 1991	Nov.** 1991	Dec. 1990	Nov. - Dec.	1990 - 1991	Dec.* 1991	Nov.** 1991	Dec. 1990	Nov. - Dec.	1990 - 1991
TOTAL CIVILIAN LABOR FORCE***	1730.4	1734.7	1736.8	18.7	5.3	1068.3	1070.3	1077.6	8.1	-3.9	320.2	323.0	315.1	4.7	7.1
Total Unemployment	133.4	118.6	94.0	14.7	29.1	72.9	64.5	48.7	7.7	17.1	17.0	13.0	3.2	3.6	
Unemployment Rate	7.7%	6.8%	5.4%	—	—	6.8%	6.0%	4.5%	—	—	5.3%	5.3%	4.1%	—	—
Unemployment Rate (Sea. Adj.)****	8.6%	7.3%	5.9%	—	—	7.4%	6.3%	4.8%	—	—	5.7%	5.3%	4.3%	—	—
Total Employment	1597.0	1616.1	1642.8	4.0	-23.8	995.4	1005.8	1028.9	0.4	-23.4	303.1	306.0	302.1	1.5	3.5

Note: **Above labor force statistics should not be used for economic-assistance programs**

NON-AGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

TOTAL WAGE AND SALARY	1548.1	1544.5	1536.8	5.9	12.8	1016.2	1013.3	1016.6	3.1	0.0	268.8	267.9	260.6	1.9	7.9
Manufacturing	177.7	178.0	184.8	-1.0	-7.1	131.6	131.8	137.3	-1.1	-5.9	25.2	25.3	26.4	0.1	-1.1
Durable Goods	131.3	131.6	138.4	-0.7	-7.2	99.3	99.4	104.6	-0.8	-5.5	19.4	19.5	20.6	0.1	-1.1
Stone, Clay, and Glass	5.9	6.0	6.6	-0.2	-0.7	3.2	3.3	3.9	-0.1	-0.6					
Primary and Fabricated Metals	13.9	13.8	14.3	0.1	-0.4	9.4	9.4	9.7	0.0	-0.3					
Primary Metals	6.1	6.1	6.2	0.1	0.0										
Fabricated Metals	7.8	7.7	8.1	0.0	-0.4										
Machinery	56.6	56.6	58.9	-0.1	-2.6	47.2	46.9	48.6	-0.1	-2.0					
Aircraft and Missiles	23.6	23.9	27.2	-0.5	-3.5										
Lumber and Wood Products (Excluding Furniture)	6.5	6.5	6.5	-0.1	0.0										
Nondurable Goods	46.4	46.4	46.4	-0.3	0.1	32.3	32.4	32.7	-0.3	-0.4	5.8	5.8	5.8	0.0	0.0
Food and Kindred Products	11.2	11.2	10.4	0.0	0.8	7.6	7.6	7.1	0.0	0.4					
Printing and Publishing	16.8	16.7	17.4	-0.1	-0.5	11.6	11.6	12.2	-0.2	-0.6					
Mining and Quarrying	13.3	13.3	12.6	0.0	0.6	0.7	0.7	0.7	0.0	0.0	2.4	2.4	2.3	0.0	0.1
Copper Mining	10.7	10.7	10.0	0.0	0.7										
Construction	79.6	81.0	81.5	0.2	-1.9	52.1	53.1	54.8	0.3	-2.8	15.5	15.5	14.4	0.0	1.1
Trans., Communications, & Public Utilities	81.5	81.1	83.7	0.8	-2.1	56.4	56.2	60.3	0.5	-3.5	10.8	10.7	9.6	0.0	1.1
Transportation	46.8	46.4	48.0	0.7	-0.8	33.7	33.5	36.5	0.4	-2.3	6.2	6.1	5.0	0.0	1.1
Communications and Public Utilities	34.7	34.7	35.7	0.1	-1.3	22.7	22.7	23.8	0.1	-1.2	4.6	4.6	4.6	0.0	0.0
Trade	390.4	385.9	388.9	5.0	1.8	263.1	260.1	262.9	2.8	0.9	63.7	63.1	62.1	1.1	1.0
Wholesale Trade	76.9	76.5	77.7	0.9	0.1	61.0	61.1	62.4	0.2	-0.7	7.6	7.5	7.5	0.1	0.1
Retail Trade	313.5	309.4	311.2	4.1	1.7	202.1	199.0	200.5	2.6	1.6	56.1	55.6	54.6	1.0	0.9
General Merchandise and Apparel	55.0	51.8	54.6	1.6	-1.2	33.9	31.8	33.9	1.0	-1.1	10.0	9.5	9.7	0.4	0.1
Food Stores	51.8	51.6	51.1	0.9	0.8	33.2	32.9	32.5	0.7	0.7	9.1	9.2	8.7	0.1	0.4
Automotive and Service Stations	35.2	35.3	34.7	0.0	0.6	22.0	22.2	21.5	0.1	0.7	5.6	5.6	5.5	0.0	0.2
Eating and Drinking Places	109.3	109.2	108.0	0.4	1.5	71.2	71.1	70.5	0.1	1.3	20.4	20.2	19.4	0.2	0.5
Finance, Insurance, and Real Estate	94.4	94.6	95.8	-0.1	-0.9	75.5	75.7	76.4	0.1	-0.4	11.7	11.6	11.8	0.0	-0.2
Services and Miscellaneous	429.9	428.2	416.2	-0.9	14.5	291.2	289.4	283.2	-0.7	7.7	80.0	79.7	76.0	0.1	4.4
Hotels and Lodging Places	44.7	45.1	44.5	0.3	1.0	28.9	28.9	28.2	0.4	1.2	6.6	6.7	6.5	0.1	0.3
Business Services*****	84.0	82.4	80.7	-0.8	2.8	66.7	65.3	65.0	-0.8	1.3	12.4	12.2	11.1	0.0	1.2
Health Services	106.5	106.2	103.7	0.5	3.1	68.4	68.1	67.0	0.2	1.2	23.5	23.4	22.7	0.2	1.1
Government	281.3	282.4	273.3	1.8	7.8	145.6	146.3	141.0	1.2	4.0	59.5	59.6	58.0	0.4	1.7
Federal	46.2	45.7	45.8	0.5	0.4										

* Preliminary
** Revised
*** Adjusted to the Current Population Survey to reflect place of residence

**** Normal seasonal variations have been eliminated to reflect underlying economic trends
***** Business Services underwent a series break between December 1987 and January 1988

Note: **Annual averages may not total correctly due to rounding**

Prepared by the Arizona Dept. of Economic Security, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Non-metropolitan Counties
Labor Force and Employment
December 1991

	Apache	Cochise	Coconino	Gila	Graham	Greenlee
CIVILIAN LABOR FORCE*	13,500	35,175	44,100	13,525	8,525	3,475
Total Unemployment	2,675	3,400	4,400	1,875	800	300
Rate	19.8%	9.6%	10.0%	13.8%	9.3%	8.9%
Rate (Seas. Adj.)**	21.8%	9.9%	9.5%	13.8%	9.9%	9.0%
Total Employment	10,825	31,775	39,700	11,650	7,725	3,175

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

	Apache	Cochise	Coconino	Gila	Graham	Greenlee
TOTAL WAGE AND SALARY	16,650	26,075	41,875	11,800	5,750	3,550
Manufacturing	550	1,050	3,475	1,450	225	25
Mining & Quarrying	25	100	75	1,325	0	2,000
Construction	425	950	1,400	575	175	350
T.C.P.U.	2,050	1,725	2,550	525	150	50
Trade	1,475	5,150	9,825	2,450	1,575	300
F.I.R.E.	400	650	800	300	125	25
Services & Misc.	5,825	5,100	10,425	2,425	875	175
Government	5,900	11,350	13,325	2,750	2,625	625

	La Paz	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
CIVILIAN LABOR FORCE*	5,525	38,225	27,825	39,075	12,650	42,325	57,950
Total Unemployment	775	4,300	3,775	4,375	2,025	3,575	11,150
Rate	14.1%	11.2%	13.6%	11.2%	16.1%	8.5%	19.2%
Rate (Seas. Adj.)**	14.7%	11.3%	14.8%	12.3%	18.7%	8.3%	30.9%
Total Employment	4,750	33,925	24,050	34,700	10,625	38,750	46,800

THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED
FOR ECONOMIC ASSISTANCE PROGRAMS

	La Paz	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
TOTAL WAGE AND SALARY	3,975	27,250	21,925	32,050	12,075	29,675	30,425
Manufacturing	250	2,500	1,975	3,750	1,000	2,475	2,225
Mining & Quarrying	75	50	1,200	4,275	25	1,050	25
Construction	300	2,550	800	400	325	2,375	1,375
T.C.P.U.	150	1,350	1,600	1,075	825	1,050	1,175
Trade	1,350	8,100	4,250	5,750	5,750	7,975	9,700
F.I.R.E.	100	1,375	450	750	275	950	1,000
Services & Misc.	775	6,650	5,075	5,275	2,025	7,450	6,525
Government	975	4,675	6,575	10,775	1,850	6,350	8,400

* Adjusted to the Current Population Survey (CPS) to reflect place of residence.

** Seasonal adjustment not applicable for economic assistance programs.

T.C.P.U. = Transportation, Communications, and Public Utilities

F.I.R.E. = Finance, Insurance, and Real Estate

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Estimated Hours and Earnings of Production Workers in Selected Industries
Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Dec.* 1991	Nov.** 1991	Dec. 1990	Dec.* 1991	Nov.** 1991	Dec. 1990	Dec.* 1991	Nov.** 1991	Dec. 1990
Manufacturing	$451.52	$445.63	$427.76	41.5	41.3	40.7	10.88	10.79	10.51
Aircraft & Missiles	692.85	668.50	691.01	46.5	45.6	47.2	14.90	14.66	14.64
Food & Kindred Prod.	335.51	335.29	356.33	38.3	39.4	39.2	8.76	8.51	9.09
Primary Metals	479.20	501.02	494.54	39.9	40.8	37.1	12.01	12.28	13.33
Machinery	455.95	455.80	390.26	41.3	41.1	39.5	11.04	11.09	9.88
Copper Mining	638.55	652.44	625.65	43.0	43.7	43.0	14.85	14.93	14.55
Construction	435.24	449.21	438.65	36.3	36.7	37.3	11.99	12.24	11.76
Utilities	813.03	769.88	752.58	43.9	42.7	44.4	18.52	18.03	16.95
Retail Trade***	275.99	271.36	256.79	32.7	32.0	32.3	8.44	6.48	7.95
Wholesale Trade	414.00	413.71	403.37	38.8	38.2	39.2	10.67	10.83	10.29

Estimated Hours and Earnings of Production Workers in Selected Industries
Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Dec.* 1991	Nov.** 1991	Dec. 1990	Dec.* 1991	Nov.** 1991	Dec. 1990	Dec.* 1991	Nov.** 1991	Dec. 1990
Manufacturing	$475.03	$461.42	$458.81	42.3	42.1	41.9	11.23	10.96	10.95
Construction	454.84	469.61	464.96	36.3	37.3	38.3	12.53	12.59	12.14
Retail Trade***	296.14	288.96	271.58	34.0	33.1	32.8	8.71	8.73	8.28
Wholesale Trade	429.66	428.68	434.66	39.6	38.9	39.3	10.85	11.02	11.06

Estimated Hours and Earnings of Production Workers in Selected Industries
Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	Dec.* 1991	Nov.** 1991	Dec. 1990	Dec.* 1991	Nov.** 1991	Dec. 1990	Dec.* 1991	Nov.** 1991	Dec. 1990
Manufacturing	$439.60	$418.24	$409.07	41.2	40.1	39.6	10.67	10.43	10.33
Construction	386.64	383.40	384.89	35.8	35.5	34.8	10.80	10.80	11.06
Utilities	668.95	654.10	620.33	42.5	42.2	41.3	15.74	15.50	15.02

* Preliminary.

** Revised

*** Excludes eating and drinking places.

Note: These estimates are based on a sample of full- and part-time production and related employees whose payroll and hours are reported for the pay period which includes the 12th of the month.

Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Arizona Labor Force and Employment for Economic Assistance Programs
December 1991

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,730,412	1,597,002	133,410	7.7%
Apache	13,517	10,835	2,682	19.8
Cochise	35,173	31,783	3,390	9.6
Coconino	44,098	39,692	4,406	10.0
Gila	13,511	11,646	1,865	13.8
Graham	8,535	7,737	798	9.3
Greenlee	3,492	3,182	310	8.9
La Paz	5,545	4,762	783	14.1
Maricopa	1,068,278	995,369	72,909	6.8
Mohave	38,223	33,929	4,294	11.2
Navajo	27,829	24,049	3,780	13.6
Pima	320,194	303,137	17,057	5.3
Pinal	39,083	34,706	4,377	11.2
Santa Cruz	12,647	10,615	2,032	16.1
Yavapai	42,336	38,752	3,584	8.5
Yuma	57,949	46,807	11,142	19.2

These figures are the only official BLS labor statistics to be used for revenue sharing purposes. They are not designed to be used as economic indicators.

NOTE: Series for Yuma and La Paz counties start January 1983.
Data are not comparable to any past series.

Job Estimates

(Continued from page 2)

15-year period studied (1975-1990).

- By 2005, the labor force — those working or looking for work — is expected to be 151 million, an increase of 26 million from 1990. The increase from 1975 to 1990 was 31 million.

- The labor force participation rate — the percent of the population in the labor force — is projected to continue to increase, although at a slower rate than during the previous 15 years. This slower increase reflects two important developments — aging of the population and the expected smaller increases in the participation of younger women in the labor force.

- The rate of growth of blacks, Hispanics, and Asian and other groups in the labor force is projected to be more rapid than for whites. The rate of growth for blacks, however, is expected to be slower than for Hispanics or the Asian and other groups.

- Between 1990 and 2005, 55.8 million people are expected to enter the labor force; nearly 30 million of them will replace workers who leave the labor force for retirement or other reasons. Labor force entrants will be almost equally women and men, but those leaving the labor force are more likely to be men, largely reflecting their higher proportion of the older labor force.

Industry Employment:

- BLS projects total employment will increase by 24.6 million from 1990 to 2005, an average annual growth rate of 1.2 percent. Total employment will grow from 122.6 million in 1990 to an expected 147.2 million in 2005.

- Almost all of the employment increase is projected to occur in the service-producing sectors, which include services; transportation, communications, and public utilities

(TCPU); finance, insurance, and real estate (FIRE); trade (wholesale and retail); and government. In the goods-producing sector, job increases in the construction industry — from 5.1 million to 6.1 million — will largely offset job declines in manufacturing — 19.1 million to 18.5 million.

- Within the service-producing sectors, the services division is expected to add nearly one-half of the total growth of non-farm wage and salary jobs (23.3 million). The two largest industries in this division — health services and business services — together account for 6.1 million, or about one-fourth, of the projected total increase in non-farm payroll jobs. Large numbers of new jobs also are projected for other service-producing divisions — retail trade (5.1 million), state and local government (3.2 million), and FIRE (1.4 million).

Occupations:

- Employment in major occupational groups that require the most education or training — executive, administrative, and managerial workers; professional specialty occupations; and technicians and related support occupations — will grow faster than the overall average (20.1 percent). These three groups, which accounted for just more than one-fourth of total employment in 1990, are expected to represent 41 percent of the increase in employment between 1990 and 2000 (see table 1).

Table 1. Employment by Major Occupational Group, 1990 and Projected 2005 (Moderate Alternative), and Percent Change, 1975-90 and 1990-2005

(In Millions)

Occupations	1990		2005		Pct. Change	
	Total	Pct.	Total	Pct.	1975-90	1990-2005
Total, all occupations	**122.6**	**100.0**	**147.2**	**100.0**	**37.4**	**20.1**
Executive, administrative, and managerial	12.5	10.2	15.9	10.8	83.1	27.4
Professional specialty........	15.8	12.9	20.9	14.2	59.9	32.3
Technicians and related support	4.2	3.4	5.8	3.9	75.7	36.9
Marketing and sales	14.1	11.5	17.5	11.9	55.1	24.1
Administrative support including clerical..............	22.0	17.9	24.8	16.9	33.9	13.1
Service occupations	19.2	15.7	24.8	16.9	36.1	29.2
Agricultural, forestry, fishing, and related	3.5	2.9	3.7	2.5	-9.8	4.5
Precision production, craft, and repair	14.1	11.5	15.9	10.8	28.9	12.6
Operators, fabricators, and laborers	17.2	14.1	18.0	12.2	6.7	4.2

Note: The 1990 and 2005 employment data and the projected change 1990-2005 are derived from the industry-occupation employment matrixes for each year. The data on 1975-90 percent change were derived from the Current Population Survey (CPS) because a comparable industry-occupation matrix for 1975 is not available. The CPS data represent estimates of employed persons and exclude the estimates of persons with more than one job that are included in the industry-occupation employment matrices. The CPS exclusion of dual jobholders affects the employment levels and trends of some occupational groups more than others. Therefore, the resulting comparisions of change between 1975-90 and 1990-2005 are only broadly indicative of trends.

Source: U.S. Department of Labor, Bureau of Labor Statistics, November 1991

- Despite the faster growth in occupations that require higher education, the structure of employment by major occupational group is expected to change only moderately from 1990 to 2005, as shares of total employment for most groups are projected to change by less than 1 percentage point. Among occupations requiring relatively little education and training, only service workers are expected to experience above-average employment growth (29.2 percent).

- The fastest growing segments of the labor force — women, blacks, and Hispanics — are disproportionately employed in occupations that are projected to grow more slowly or decline, or that pay relatively lower wages. However, since the educational attainment of employed women roughly matches that of the labor force as a whole, women are expected to increase their proportions in higher paying jobs. But employed blacks and Hispanics, whose educational attainment is below the labor force average, may lose ground unless gains are made in schooling, particularly at the post-secondary level.

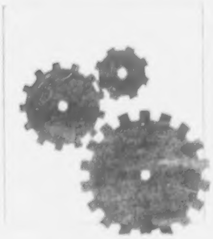
—U.S. Department of Labor,
Bureau of Labor Statistics

More detailed information on the 1990-2005 projections is available in the Fall 1991 issue of Occupational Outlook Quarterly and in five articles in the November 1991 issue of the Monthly Labor Review. Both are published by the U.S. Department of Labor's Bureau of Labor Statistics and are available at major libraries or by contacting the U.S. Government Printing Office in Washington, D.C.

NEW DEVELOPMENTS

Revlon Plant May Add 700 Positions; Gerber to Close Operations in Tempe

"New Developments" is featured each month as a service to our readers. This section is a compilation of public announcements and articles from newspapers and periodicals about events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of business news is not possible. In addition, the Arizona LMI Newsletter is not responsible for incorrect information reported by these sources.



MANUFACTURING — Restructuring of three manufacturing facilities by **Revlon Inc.** could lead to more than **700 new jobs** at the New York-based company's plant in Tolleson, which makes a variety of personal-care products. The restructuring process should be complete by the end of winter or early spring. The plant currently employs about 2,000 people.

As part of a company-consolidation plan, **Gerber Childrenswear Inc. will close its manufacturing operations in Tempe** by the middle of March, eliminating 375 jobs. The plant makes ladies' briefs and infant wear under the Gerber label and for other retailers.

Deluxe Corp. of Minnesota plans to **consolidate its check-printing operations in three Tempe locations** into one 100,000-square-foot plant within the Southbank business park on University Drive and 35th Street Phoenix. The new location, expected to be open by next January, **will allow for future expansion** and eventually house up to 300 employees. No information is available on how many of the 300 jobs would be new.

Rohr Industries of San Diego, which manufacturers aerospace parts, is **denying a rumor that it will build a manufacturing plant** that would employ more than 300 people on 229 acres it plans to purchase in Casa Grande. An official with the company says it plans to build a tool-storage facility at the intersection of Interstate 10 and Arizona 84 that will employ 15 people, but the official did not rule out other uses for the property down the line.

In January, **Motorola Inc. cut about 350 jobs** from its **Government Electronics Group**, located in Scottsdale and Chandler, due to a dropoff in defense spending. The group, which makes electronic components and systems, now has about 5,500 employees, 500 less than in 1991 and a drop of about one-third since it reached its peak of 8,600 in 1988.

A manufacturer of household plastic items plans to **expand its operations** by building a 67,000-square-foot facility at an undetermined location in Phoenix. **Frem Corp.** of Worcester, Mass., which makes items such as laundry baskets and crates, expects to initially employ 40 people. The company chose Phoenix over sites in three other western states.

FINANCE, INSURANCE AND REAL ESTATE — **New-home sales in Arizona rose dramatically in 1991**, but sales for existing homes, apartments, town homes, and condominiums remained flat, according to the Arizona Real Estate Center at Arizona State University. Single-family home sales grew 8.4 percent last year — from 7,902 to 8,563 — while sales of existing homes dropped 2.1 percent over the year, from 25,247 to 24,714. Sales of new condominiums and town homes declined 38 percent, but resales rose 7.3 percent; apartment unit permits slid from 1,891 in 1990 to 710 in '91.

About **200 jobs will be created in Chandler** over the next two years by **United Student Aid Funds Inc. and the Arizona Education Loan Program**. The two operations will lease about 29,000 square feet in the Rocky Mountain Financial Center. United Student Aid will service and administer student loans in 11 western states, including those started by Arizona Education Loan Program.

TRADE — Only a few months after it opened a new administrative center in Tempe that employs 650 workers, **Carter Hawley Hale Stores Inc.** announced it will **close its Southwest division headquarters in Mesa**, eliminating 240 jobs. The Mesa operations will be consolidated with operations in the company's home base in Los Angeles. Some laid-off workers could be given transfers to Los Angeles or San Francisco offices, or have a chance for 50 unfilled jobs in Tempe.

The **Smitty's supermarket chain** has **sold its grocery trucks and warehouse facilities**, eliminating 55 jobs, but the Phoenix-based company plans to **open two new stores**, one in Phoenix and Tucson, and remodel three others. Food wholesaler Fleming

Correction

On the front page of the January 1992 issue of the *Arizona LMI Newsletter*, some unemployment rate and consumer price index data for November 1991 were incorrectly reported. The data should have appeared as follows: Seasonally Adjusted Unemployment Rate — Arizona, 7.3%; Maricopa County, 6.2%; Pima County, 5.2%; United States, 6.8%. U.S. Consumer Price Index and Percent Change Year Ago — Wage Earner/Clerical Worker, 135.8 and 2.7%; All Urban, 137.8 and 3.0 percent. We regret any inconvenience the error may have caused.

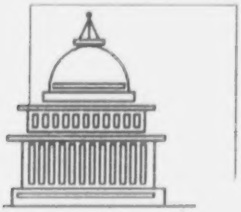
Foods of Oklahoma City bought the warehouse facility and will provide financing, along with Bank of America Arizona, for Smitty's expansion and remodeling plans. Smitty's currently operates 24 stores, all in the Phoenix metropolitan area.

A fixture of Valley furniture retailers, **Lou Regester Fine Home Furnishings**, will end its 43-year operation in March, forcing the **layoff of 75 employees** at its two remaining Phoenix stores. Poor sales will force the closure of two Camelback Road locations, after a location in Surprise closed in December and a Tucson location shut its doors two years ago.

SERVICES — Tucson's oldest psychiatric facility, **Palo Verde Hospital**, has **laid off 22 workers**, or 20 percent of its staff, due to low patient occupancy rates. Many of the job losses involved middle-management positions. Low occupancy rates are due to a glut of psychiatric facilities in the Tucson area and insurance companies that are less willing to pay for in-patient treatment, the hospital says.

The North American base of **Ramada International Hotels & Resorts** is moving to Miami from Phoenix, resulting in the **loss of 70 jobs**; 20 employees will relocate to Miami. The move, a result of a consolidation of Ramada's North American and Latin American operations, will not affect 450 Ramada Inns reservations agents in Phoenix, which are part of a separate company.

GOVERNMENT — Several Arizona cities are feeling the effects of the national recession. In the last several months, Phoenix and Tucson announced plans for layoffs, and now two other Arizona cities have plans for significant cuts. An expected $1.6 million budget shortfall will force the city of Glendale to lay off about 40 people as early as March. The areas affected were not detailed, but all laid-off employees will be offered severance packages. Meanwhile, Nogales recently cut 32 people from its workforce of 260 due to a $1 million budget shortfall and reduced remaining workers' pay by 5 percent.



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RA Updates 2 Occupational Profiles

The Arizona Department of Economic Security's Research Administration recently updated two publications in its *Arizona Occupational Profiles* series. The revised publications — which focus on the manufacturing and hospital industries — are a product of an ongoing study coordinated by the U.S. Department of Labor's Bureau of Labor Statistics, which provide a comprehensive look at the occupational composition of Arizona's industries.

These *Profiles* provide estimates of employment and job opportunities through 1994 for nearly 400 manufacturing and 200 hospital occupations. Occupational data for Arizona and each of the state's counties are based on employer survey responses.

Following are some of the highlights from each publication.

Manufacturing:

- employment in professional and technical occupations is increasing the fastest.
- precision electrical and electronic equipment assemblers are projected to lose the most employment between 1989 and 1994.
- four of the top six occupations, based on employment, are directly related to the production of electrical goods.
- in Pima County, one manufacturing worker in four is a professional, paraprofessional, or technical worker, whereas in the non-metropolitan counties the ratio is about one in 17.

Hospitals:

- employment in professional and technical occupations is increasing the fastest.
- employment of registered nurses is projected to increase 7,300 between 1989 and 1994.
- the number of hospitals classified as psychiatric has decreased in recent years, while the number of specialty hospitals — including rehabilitation facilities — has increased.

These and other labor market publications prepared by the DES, Research Administration, can be ordered by writing to the address on the back of this newsletter or by calling (602) 542-3871. Single copies of each publication are available on request, while multiple copies can be ordered at a nominal charge. The order number for the manufacturing publication is PAL-340; the hospital publication number is PAL-332. DES offices can order directly from DES supply.

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ARIZONA LABOR MARKET INFORMATION NEWSLETTER

Vol. XVI No. 3
March 1992

Unemployment Rate

Seasonally Adjusted
January*

ARIZONA	–	9.3%
Maricopa Co.	–	8.3
Pima Co.	–	6.5
United States	–	7.1

Consumer Price Index

U.S. – January 1992
Base = 1982-84

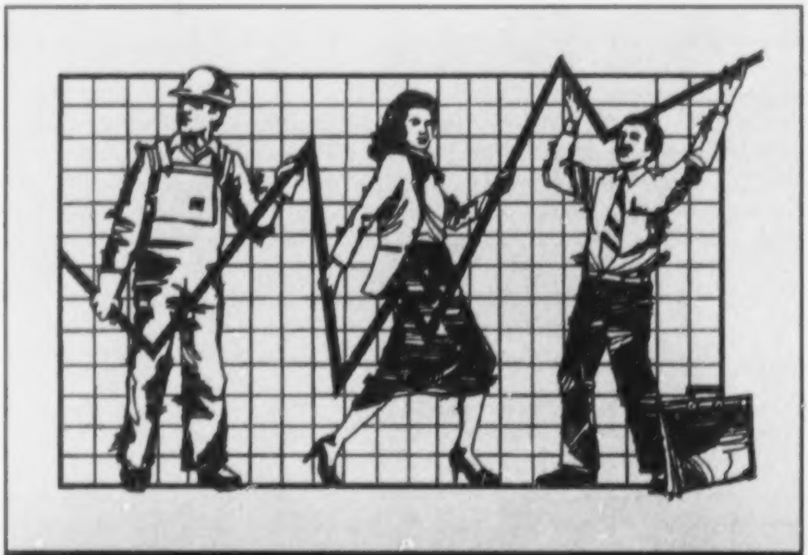
Wage Earner/Clerical Worker	–	136.0
% Chg. Year Ago	–	2.4
All Urban	–	138.1
% Chg. Year Ago	–	2.6

Phoenix – 4th Qtr 1990
Base = 1982-84

All Urban	–	138.4
% Chg. Year Ago	–	2.3

Tucson CPI No Longer Available (see May 1991 *Arizona LMI Newsletter*

* Preliminary



Forecast Update

'92-'93

Research Administration Issues Two-Year Employment Projections

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Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

State Expected to Grow Modestly Over Next 2 Years

Note: In late February each year, the Arizona Department of Economic Security's Research Administration (RA) issues a two-year forecast of labor force, employment, and unemployment for the state and its three major substate regions — Maricopa and Pima counties, and the non-metropolitan counties as a whole.

The forecast's results and an analysis are published in the March issue of the Arizona Labor Market Information Newsletter. Then, six months later the forecast is updated to reflect new economic data and is detailed in the September Arizona LMI Newsletter.

Arizona

Arizona's economy slowed substantially in 1991, but the state still managed to end the year with positive wage and salary job growth. But while non-farm payroll jobs grew 0.8 percent on an annual-average basis, it was the worst showing since 1982 when the number of wage and salary jobs decreased 1.1 percent.

The state's anemic job growth can be attributed to a national recession that has eroded consumer confidence, depressed retail sales, slowed orders for durable goods, and led to stagnant investment in non-residential construction. However, it appears the worst of the recession's effects in Arizona is over.

The Arizona Department of Economic Security's Research Administration (RA) forecasts very modest job growth for the first half of 1992 with more robust growth occurring in the last two quarters of the year. RA's forecast for 1993 calls for continued improvement, but the rate of job growth will likely be below rates of the mid-1980s. Non-farm payroll employment is expected to grow 2.0 percent in 1992, followed by a 2.8 percent rise in 1993.

The major industry groups of manufacturing; construction; transportation, communications, and public utilities (TCPU); and finance, insurance, and real estate (FIRE) all experienced job declines in Arizona last year. And RA's forecast for 1992 calls for continued employment declines in the manufacturing and construction sectors with both industries having modest growth in 1993. All other major industry groups in Arizona are expected to have job growth in both years.

Arizona's manufacturing industries will be the slowest to recover, as continued cutbacks in defense spending will make it difficult for durable goods manufacturers to increase production and employment. Durable-goods manufacturers, especially those in the high-tech industries, are forecast to continue to pare employment as they restructure to become more competitive. Arizona's manufacturing employment is expected to decline 2.1 percent (3,700 jobs) in 1992, before growing 0.6 percent (1,100 jobs) in 1993.

The state's construction industry had another disappointing year in 1991 as employment fell 5,200. General construction, heavy construction, and special trades all lost employment in 1991. Special trades employment is expected to show improvement in 1992, but continued job losses in general and heavy construction will result in an overall loss of 500 construction jobs. In 1993, construction are projected to add 900 positions with all three subindustries having positive growth.

Mining will continue to add jobs in both 1992 and 1993 with all of the growth occurring in the copper mining industry. The balance of the mining industries as a group will experience modest employment losses in both forecast years.

Services Expected to Rebound

Between 1983 and 1990, Arizona's service industries created more than 20,000 new jobs a year, before "slipping" to gains of 13,400 in 1990 and 10,900 last year. For the next two years, services is expected to make some improvement, but job growth will continue to be below the 20,000 mark. RA projects services will create 15,100 jobs in 1992 and 17,000 in 1993. The catch-all category of "other services" — which includes, among other sectors, legal services and personnel services — is expected to lead the way, adding 4,800 jobs in 1992 and 6,000 in 1993.

U.S. Economy Will Influence Arizona's Fate

Research Administration's two-year employment and labor market forecasts are primarily a product of the Arizona Employment Forecasting Model (AEFM), a 250-equation econometric model that simulates the economies of Arizona and its substate regions.

Input into the model are statewide employment, unemployment, and population data, as well as forecasts of national economic variables (e.g., interest rates, inflation) that will likely affect job growth nationally and in Arizona. Research Administration (RA) uses U.S. economic forecasts derived by The WEFA Group (formerly Wharton Econometric Forecasting Associates), a Pennsylvania-based national forecasting organization.

One of the major indicators of where the nation's and Arizona's economies are headed is U.S. real gross domestic product (GDP). And WEFA expects GDP, which measures economic activity within the U.S. borders, to grow

(Continued on page 13)

Like services, trade has had weaker-than-normal growth in the 1990s. Trade grew by less than two percent in both 1990 and 1991, compared to growth rates of three-plus percent following the recessionary year of 1982. RA's forecast calls for trade's rate of growth to improve to 2.2 percent in 1992 and 2.5 percent in 1993, but this is still well below the long-term average gain. Contributing to trade's growth are expected job gains in wholesale trade, automotive and service stations, and eating and drinking establishments.

TCPU Expected to Recover Slowly

The major industry group of transportation, communications, and public utilities (TCPU) lost 1,300 jobs in 1991. All of the loss was due to the communications and public utilities industries. Surprisingly, despite major job losses in the air-transportation sector, transportation overall had a modest employment increase in 1991. This follows more substantial gains in prior years. Modest job growth is forecast to continue in the transportation industry the next two years, while employment losses are expected in the communications and public utilities sectors in 1992, before turning positive in 1993. Overall, TCPU will probably grow at a rate of 1.2 percent in 1992 and 1.4 percent in 1993.

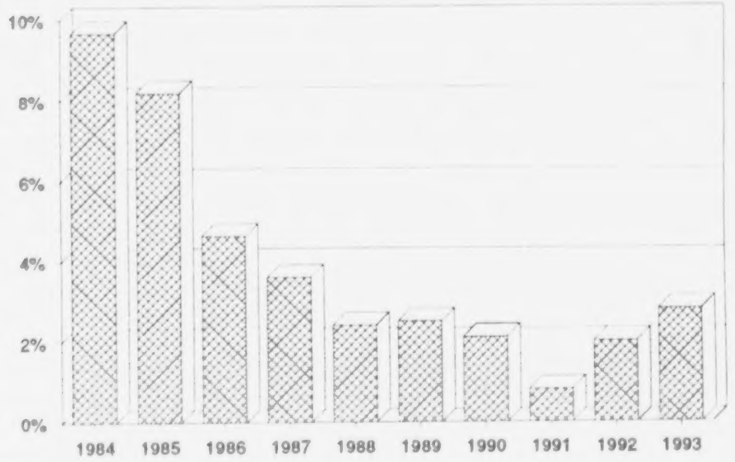
Employment in the finance, insurance, and real estate (FIRE) group declined 1.5 percent in 1991 with most of the decline occurring in the finance sector. The forecast for 1992 calls for improved growth in the insurance and real estate sectors, and continued losses in the finance industry. Overall, FIRE should gain 300 jobs this year. For 1993, continued improvement in the insurance and real estate sectors, as well as in the finance sector, is forecast to result in 1,700 additional FIRE jobs.

Government, meanwhile, is projected to add the second greatest number of jobs for all major industry groups in Arizona — 9,700 in 1992 and 10,300 in 1993. Increases in school employment are expected to account for approximately two-thirds of this growth.

Finally, Arizona's unemployment rate is expected to climb to an average rate of 6.3 percent in 1992 after posting a 5.6 percent rate in 1991. The U.S. unemployment rate in 1991 averaged 6.8 percent. Causing the higher Arizona unemployment rate is expected faster growth in total unemployment than total employment. For 1993, a

Figure 1

Arizona Wage and Salary Employment Growth Rates, Actual (1984-1991) and Projected (1992, 1993)



Source: Arizona Dept. of Economic Security, Research Administration, February 1992

Table 1

Arizona Labor Force, Employment, and Unemployment Data and Growth Rates, Actual (1991) and Projected (1992, 1993)

(in Thousands)

	1991	Growth Rate	1992	Growth Rate	1993	Growth Rate
Labor Force	1,704.0	-1.3%	1,752.3	2.8%	1,797.1	2.6%
Unemployment	96.0	4.3%	109.9	14.5%	105.2	-4.3%
Unemployment rate	5.6%		6.3%		5.9%	
Total Employment	1,608.0	-1.6%	1,642.4	2.1%	1,691.9	3.0%
Total Wage and Salary Employment[a]	1,497.6	0.8%	1,528.2	2.0%	1,570.9	2.8%
Manufacturing	176.5	-4.9%	172.8	-2.1%	173.9	0.6%
Mining	13.6	7.9%	14.2	4.4%	14.9	4.9%
Construction	77.5	-6.3%	77.0	-0.6%	77.9	1.2%
TCPU[b]	80.8	-1.6%	81.9	1.4%	83.0	1.3%
Trade	373.3	1.4%	381.5	2.2%	391.2	2.5%
FIRE[c]	92.7	-1.5%	93.0	0.3%	94.7	1.8%
Services	412.0	2.6%	427.1	3.7%	444.1	4.0%
Government	271.2	4.7%	280.9	3.6%	291.2	3.7%

Notes: a) Industry totals may not add up correctly due to rounding; excludes agricultural employment
b) Transportation, communications, and public utilities
c) Finance, insurance, and real estate

Source: Arizona Dept. of Economic Security, Research Administration, February 1992

decline in total unemployment will help drop the state's unemployment rate to 5.9 percent.

In conclusion, the near-term outlook for Arizona's economy remains positive. While the national recession has certainly had its negative impact in Arizona, it's some solace to note that the state continued to create jobs in 1991, however modest the growth. And with the national economy beginning to show signs of life in the early part of 1992, it's expected that Arizona's economy will be well into recovery by 1993.

Maricopa County

Non-farm wage and salary employment in Maricopa County declined 0.1 percent in 1991, resulting in a loss of 900 positions. This was the first drop in non-farm payroll jobs since 1982 when there was also a 0.1 percent decline.

As in 1982, the manufacturing and construction industries were responsible for most of the county's job losses last year. Other major industry groups to experience job losses in 1991 were transportation, communications, and public utilities (TCPU); and finance, insurance, and real estate (FIRE).

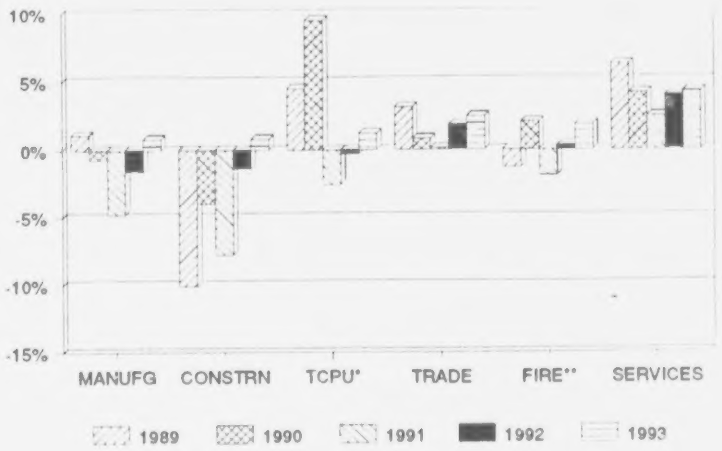
The outlook for Maricopa County employment in 1992 is for continued weakness in manufacturing, construction, and TCPU, with a modest gain expected in FIRE. By 1993, all of Maricopa County's major industry groups are expected to experience positive growth.

RA forecasts manufacturing will lose 2,100 jobs in 1992 before adding 1,000 new positions in 1993. Within manufacturing, durable-goods industries are forecast to continue to experience employment declines as defense-related cutbacks march forward.

Job losses in construction will slow considerably in 1992 with only 700 jobs expected to be lost compared to the 4,300 cut in 1991. By 1993, Arizona's construction industry is expected to show positive growth, adding 400 new jobs.

Figure 2

Maricopa County Wage and Salary Employment Growth Rates, by Selected Major Industry Groups, Actual (1984-1991) and Projected (1992, 1993)



*TCPU = TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES
**FIRE = FINANCE, INSURANCE, AND REAL ESTATE

Source: Arizona Dept. of Economic Security, Research Administration, February 1992

Table 2

Maricopa County Labor Force, Employment, and Unemployment Data and Growth Rates, Actual (1991) and Projected (1992, 1993)

(in Thousands)

	1991	Growth Rate	1992	Growth Rate	1993	Growth Rate
Labor Force	1,054.8	-2.4%	1,077.7	2.2%	1,102.2	2.3%
Unemployment	51.4	10.5%	57.0	10.9%	53.4	-6.3%
Unemployment rate	4.9%		5.3%		4.8%	
Total Employment	1,003.4	-3.0%	1,020.7	1.7%	1,048.8	2.8%
Total Wage and Salary Employment[a]	984.3	-0.1%	1,001.6	1.8%	1,028.5	2.7%
Manufacturing	132.2	-4.8%	130.1	-1.6%	131.1	0.8%
Mining	0.7	-12.5%	0.7	0.0%	0.7	0.0%
Construction	51.1	-7.8%	50.4	-1.4%	50.8	0.8%
TCPU[b]	57.3	-2.6%	57.1	-0.3%	57.8	1.2%
Trade	247.9	0.1%	252.3	1.8%	258.4	2.4%
FIRE[c]	74.0	-1.9%	74.2	0.3%	75.5	1.8%
Services	280.6	2.4%	291.6	3.9%	303.8	4.2%
Government	140.5	4.4%	145.1	3.3%	150.4	3.7%

Notes: a) Industry totals may not add up correctly due to rounding; excludes agricultural employment
b) Transportation, communications, and public utilities
c) Finance, insurance, and real estate

Source: Arizona Dept. of Economic Security, Research Administration, February 1992

TCPU is expected to drop 200 positions in 1992 as losses in the communications and public utilities sectors slow. Positive job growth is forecast for 1993. The transportation sector are projected to show modest job growth in both forecast years.

FIRE lost 1,400 jobs in 1991, primarily due to losses in the finance sector. FIRE, however, are forecast to add 200 jobs in 1992 and 1,300 positions in 1993 as the result of both moderately strong job gains in the insurance and real estate sectors the next two years and the end of finance sector losses by 1993.

Trade, services, and government will continue to create the most jobs in Maricopa County. These three industries account for more than two-thirds of the county's non-farm wage and salary jobs and will continue to generate the most employment opportunities.

Trade is expected to add 4,400 positions in 1992 and 6,100 jobs in 1993. Services employment is projected to increase by 11,000 in 1992 and 12,200 in 1993. And government is forecast to have job gains of 4,600 in 1992 and 5,300 in 1993.

The unemployment rate in Maricopa County increased six-tenths of a percentage point in 1991 to 4.9 percent (on an annual-average basis). RA's forecast calls for the county's unemployment rate to climb an additional four-tenths of a percentage point in 1992 to 5.3 percent. And improved employment opportunities in 1993 will help to lower the annual rate to 4.8 percent.

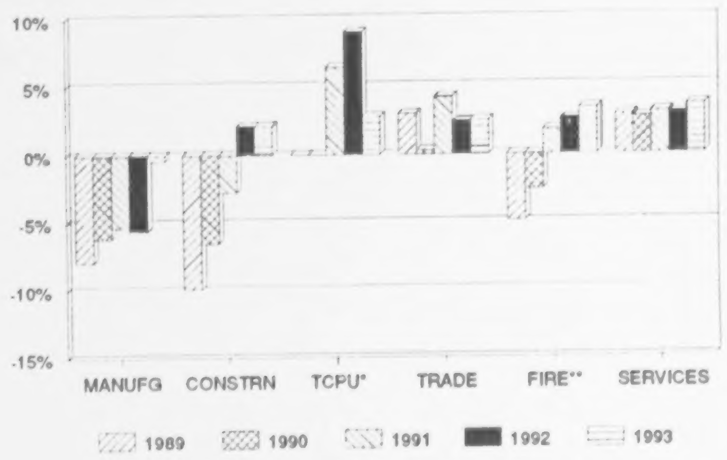
Pima County

All of Pima County's major industry groups, except manufacturing, are projected to experience positive job growth in both 1992 and 1993. Pima County added 6,900 non-farm wage and salary jobs in 1991 and is projected to add another 7,100 in 1992 and 8,100 in 1993.

Manufacturing employment in Pima County is expected to suffer from the same defense-related cutbacks that will stunt growth in Maricopa County. As is the

Figure 3

Pima County Wage and Salary Employment Growth Rates, by Selected Major Industry Groups, Actual (1984-1991) and Projected (1992, 1993)



*TCPU = TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES
**FIRE = FINANCE, INSURANCE, AND REAL ESTATE

Source: Arizona Dept. of Economic Security, Research Administration, February 1992

Table 3

Pima County Labor Force, Employment, and Unemployment Data and Growth Rates, Actual (1991) and Projected (1992, 1993)

(in Thousands)

	1991	Growth Rate	1992	Growth Rate	1993	Growth Rate
Labor Force	311.7	0.6%	321.7	3.2%	333.5	3.7%
Unemployment	12.2	-5.4%	14.0	14.8%	14.3	2.1%
Unemployment rate	3.9%		4.4%		4.3%	
Total Employment	299.5	0.9%	307.7	2.7%	319.2	3.7%
Total Wage and Salary Employment[a]	259.0	2.7%	266.1	2.7%	274.2	3.0%
Manufacturing	24.8	-5.3%	23.4	-5.6%	23.3	-0.4%
Mining	2.3	4.5%	2.4	4.3%	2.5	4.2%
Construction	14.1	-2.8%	14.4	2.1%	14.7	2.1%
TCPU[b]	10.0	6.4%	10.9	9.0%	11.2	2.8%
Trade	61.6	4.2%	63.1	2.4%	64.7	2.5%
FIRE[c]	11.6	1.8%	11.9	2.6%	12.3	3.4%
Services	75.6	3.1%	77.9	3.0%	80.7	3.6%
Government	59.0	5.5%	62.2	5.4%	64.8	4.2%

Notes: a) Industry totals may not add up correctly due to rounding; excludes agricultural employment
b) Transportation, communications, and public utilities
c) Finance, insurance, and real estate

Source: Arizona Dept. of Economic Security, Research Administration, February 1992

case in the Phoenix metro area, durable goods will be the hardest hit manufacturing sector in Pima County.

The construction industry, which lost 400 jobs in 1991, is expected to add 300 new positions in both 1992 and 1993. Construction and manufacturing were the only two industries in Pima County to lose employment in 1991.

RA's forecast calls for the rest of the major industry groups in Pima County to experience positive growth in both 1992 and 1993. Government, services, and trade will add the most new positions over the forecast period..

Total unemployment is expected to increase by 1,800 in 1992 and 300 in 1993 after dropping by 700 in 1991. RA's forecast calls for Pima County's unemployment rate to increase from 3.9 percent in 1991 to 4.4 percent in 1992. Faster growth in total employment than total unemployment will lead to a slightly improved jobless rate of 4.3 percent in 1993.

Non-metropolitan Counties

All of the state's rural counties — except Apache, Cochise, La Paz, and Navajo — had higher levels of non-farm wage and salary employment in 1991. Mohave, Yuma, and Yavapai counties added the most payroll jobs, increasing by 1,575, 1,175, and 1,100, respectively. While Mohave County added the most wage and salary jobs, on the strength of its mining industry Greenlee County had the highest job-growth rate, increasing by 12.3 percent (375 jobs).

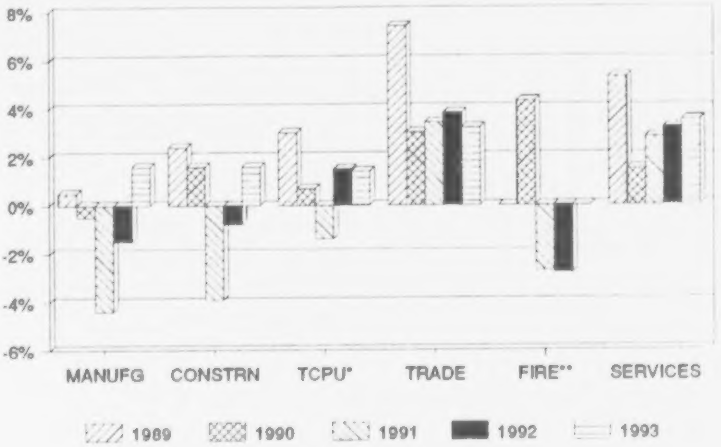
As for the upcoming two-year period, wage and salary employment in Arizona's non-metropolitan counties as a whole will continue to show strength. Payroll jobs in the rural counties are expected to grow in both the 1992 and 1993 forecast years, increasing by rates of 2.4 percent (6,200 jobs) and 2.9 percent (7,600 jobs), respectively.

As is the case in Maricopa and Pima counties, the trade, services, and government industries are expected to create the most

(Continued on page 13)

Figure 4

Non-metropolitan Counties' Wage and Salary Employment Growth Rates, by Selected Major Industry Groups, Actual (1984-1991) and Projected (1992, 1993)



*TCPU = TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES
**FIRE = FINANCE, INSURANCE, AND REAL ESTATE

Source: *Arizona Dept. of Economic Security, Research Administration, February 1992*

Table 4

Non-metropolitan Counties' Labor Force, Employment, and Unemployment Data and Growth Rates, Actual (1991) and Projected (1992, 1993)

(in Thousands)

	1991	Growth Rate	1992	Growth Rate	1993	Growth Rate
Labor Force	337.5	0.5%	352.9	4.6%	361.3	2.4%
Unemployment	32.4	-0.6%	38.9	20.1%	37.5	-3.6%
Unemployment rate	9.6%		11.0%		10.4%	
Total Employment	305.1	0.7%	314.0	2.9%	323.8	3.1%
Total Wage and Salary Employment[a]	254.3	2.4%	260.5	2.4%	268.1	2.9%
Manufacturing	19.5	-4.4%	19.2	-1.5%	19.5	1.6%
Mining	10.6	10.4%	11.1	4.7%	11.6	4.5%
Construction	12.3	-3.9%	12.2	-0.8%	12.4	1.6%
TCPU[b]	13.5	-2.9%	13.8	2.2%	14.0	1.4%
Trade	63.8	3.6%	66.1	3.6%	68.2	3.2%
FIRE[c]	7.1	-2.7%	6.9	-2.8%	6.9	0.0%
Services	55.8	2.8%	57.6	3.2%	59.6	3.5%
Government	71.7	4.7%	73.6	2.6%	75.9	3.1%

Notes:
a) Industry totals may not add up correctly due to rounding; excludes agricultural employment
b) Transportation, communications, and public utilities
c) Finance, insurance, and real estate

Source: *Arizona Dept. of Economic Security, Research Administration, February 1992*

The Arizona Labor Force in January

Arizona's seasonally adjusted unemployment rate climbed for the ninth consecutive month in January, jumping nine-tenths of a percentage point to 9.3 percent from December's revised rate of 8.4 percent. Arizona's rate, which has not been at that level or above since July 1983, has doubled from 4.6 percent in April 1991.

As might be expected, the state's two major metropolitan areas had sizable unemployment rate increases. The Phoenix metro area's rate rose to 8.3 percent in January from a revised 7.2 percent in December, while the Tucson area's rate jumped from a revised 5.5 percent rate in December to 6.5 percent in January.

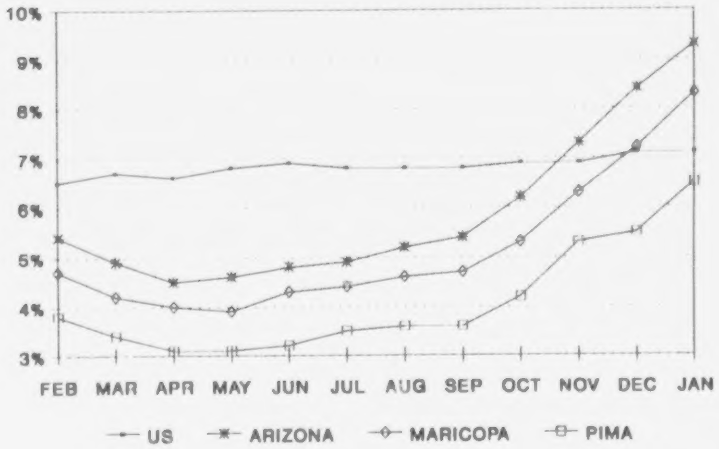
Total unemployment in January surged by 18,100 to 149,400. Driven by a three-month influx of new entrants and re-entrants into the labor force, more Arizonans were unemployed than anytime since March 1983. Unemployment peaked after the 1982 recession in February 1983, reaching 165,500. Even when Arizona suffered its historical high unemployment rate of 13.6 percent in June 1975, only 132,100 were unemployed.

Total employment's decline of only 14,700 was not a large amount compared to other January declines during the last 10 years. Were it not for the labor force increase, the seasonally adjusted rate would not have risen so dramatically. Arizona's unadjusted unemployment rate was 8.6 percent, up a percentage point from December's rate.

In January, non-farm payroll employment decreased by another 31,300 jobs, or 2 percent, about average for December to January during the last 10 years. Due to school declines, government employment was down 11,400 jobs from December, a little less than the 10-year average. Retail trade was down 10,100, although that 3.3 percent drop was about equal to the 10-year average loss.

Figure 1

U.S., Arizona, Maricopa County, and Pima County Unemployment Rates (Seasonally Adjusted), February 1991-January 1992



Source: Arizona Dept. of Economic Security, Research Administration, February 1992

Many analysts were anticipating a less-than-seasonal drop in retail trade jobs in January because stores did not increase at normal rates from October to December. An average drop for retail trade, then, may indicate employment losses in core staff. Most losses came in department stores (-5,600) and restaurants and bars (-1,200).

Services Employment Falls 1.1%

Services had an especially weak January with employers paring employment by 1.1 percent, or 4,600 jobs. Most losses were in business services (-2,000) and hotels (-800).

Hopes that construction employment would be buoyed by lower interest rates did not show up in January's employment estimates. Another 2,000 construction jobs were lost, albeit less than the seasonal norm.

Despite a surge in demand for refinancing mortgages, the finance industry was still losing jobs in January. The finance, insurance, and real estate (FIRE) group dropped 700 jobs over the month, and over the year FIRE was still down 500 jobs.

Manufacturing posted a seasonally average loss of 1,700 jobs in January. The industry as a whole has contracted almost 5 percent from a year ago, or 8,800 jobs. All of manufacturing's losses since January 1991 have been in durable goods. Of those, 6,900 were in the high-tech components of aircraft and missiles, and machinery manufacturing..

The good news in January was the rate of increase in Arizona's seasonally adjusted unemployment rate was down slightly from the more than one-point gains the previous two months. If the lingering effects of the national recession on Arizona are not at an end, it appears they are probably at least close to it.

Also, other economic indicators point to better times ahead, at least for some. Housing starts are beginning to climb, and homes have not been this affordable in years. In addition, interest rates are low, though mortgage interest rates recently began creeping up. That mortgage rates are beginning to rise in small increments may spur more buyers to enter the market, especially those who were waiting to see when rates hit bottom.

—Ron Simon,
RA Economic Analysis Manager

Table 1

Arizona Labor Force, Employment, and Unemployment Data, January 1992(a)

(in Thousands)

	Jan. 1992(b)	Dec. 1991(c)	Jan. 1991	Monthly/Yearly Change Dec. '91 - Jan. '92	 Jan. '91 - Jan. '92
Total Civilian Labor Force(d)	**1730.9**	**1727.5**	**1692.3**	**3.4**	**38.6**
Total Unemployment	**149.4**	**131.3**	**80.3**	**18.1**	**69.1**
Unemployment Rate	**8.6%**	**7.6%**	**4.7%**	**—**	**—**
Unemployment Rate (Seasonally Adjusted)(e)	**9.3%**	**8.4%**	**5.1%**	**—**	**—**
Total Employment	**1581.5**	**1596.2**	**1612.0**	**-14.7**	**-30.5**
Total Wage and Salary Employment(f, g)	**1496.7**	**1528.0**	**1478.8**	**-31.3**	**17.9**
Private Sector	1219.7	1242.6	1215.8	-22.9	3.9
Government	274.0	285.4	263.0	-11.4	11.0
Goods-Producing Industries	**261.6**	**265.4**	**270.6**	**-3.8**	**-9.0**
Manufacturing	**172.2**	**173.9**	**181.0**	**-1.7**	**-8.8**
Total Durable Goods	128.2	129.3	137.1	-1.1	-8.9
Stone, Clay, and Glass	5.0	5.2	5.6	-0.2	-0.6
Primary and Fabricated Metals	13.7	14.0	14.3	-0.3	-0.6
Primary Metals	5.8	5.9	5.9	-0.1	-0.1
Fabricated Metals	7.9	8.1	8.4	-0.2	-0.5
Machinery	54.5	54.7	57.9	-0.2	-3.4
Aircraft and Missiles	24.4	24.6	27.9	-0.2	-3.5
Lumber and Wood Products (Excluding Furniture)	6.4	6.6	6.4	-0.2	0.0
Total Non-durable Goods	44.0	44.6	43.9	-0.6	0.1
Food and Kindred Products	10.3	10.5	9.8	-0.2	0.5
Printing and Publishing	15.5	15.6	15.9	-0.1	-0.4
Mining and Quarrying	**13.9**	**14.0**	**13.2**	**-0.1**	**0.7**
Copper Mining	11.5	11.5	10.7	0.0	0.8
Construction	**75.5**	**77.5**	**76.4**	**-2.0**	**-0.9**
Service-Producing Industries	**1235.1**	**1262.6**	**1208.2**	**-27.5**	**26.9**
Transportation, Communications, and Public Utilities	**80.2**	**80.6**	**81.1**	**-0.4**	**-0.9**
Transportation	46.2	46.5	46.3	-0.3	-0.1
Communications and Public Utilities	34.0	34.1	34.8	-0.1	-0.8
Trade	**374.1**	**384.5**	**369.9**	**-10.4**	**4.2**
Total Wholesale Trade	74.8	75.1	73.9	-0.3	0.9
Total Retail Trade	299.3	309.4	296.0	-10.1	3.3
General Merchandise and Apparel	49.9	55.5	48.4	-5.6	1.5
Food Stores	51.3	51.9	50.1	-0.6	1.2
Automotive and Service Stations	34.3	34.5	33.5	-0.2	0.8
Eating and Drinking Places	104.1	105.3	103.3	-1.2	0.8
Finance, Insurance, and Real Estate	**91.6**	**92.3**	**92.1**	**-0.7**	**-0.5**
Services and Miscellaneous	**415.2**	**419.8**	**402.1**	**-4.6**	**13.1**
Hotels and Lodging Places	39.7	40.5	39.6	-0.8	0.1
Business Services	86.2	88.2	80.3	-2.0	5.9
Health Services	107.7	106.8	104.2	0.9	3.5
Government	**274.0**	**285.4**	**263.0**	**-11.4**	**11.0**
Federal	45.3	45.7	44.1	-0.4	1.2

Notes and Source: See Table 3

Table 2

Maricopa County Labor Force, Employment, and Unemployment Data, January 1992[a]

(in Thousands)

	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991	Monthly/Yearly Change Dec. '91 - Jan. '92	Monthly/Yearly Change Jan. '91 - Jan. '92
Total Civilian Labor Force[d]	1057.6	1058.5	1050.6	-0.9	7.0
Total Unemployment	82.9	71.6	42.4	11.3	40.5
Unemployment Rate	7.8%	6.8%	4.0%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	8.3%	7.2%	4.3%	—	—
Total Employment	974.7	986.9	1008.2	-12.2	-33.5
Total Wage and Salary Employment[f, g]	980.6	1001.2	979.2	-20.6	1.4
Private Sector	839.2	853.1	840.8	-13.9	-1.6
Government	141.4	148.1	138.4	-6.7	3.0
Goods-Producing Industries	179.8	182.1	187.5	-2.3	-7.7
Manufacturing	129.0	129.8	135.8	-0.8	-6.8
Total Durable Goods	97.5	98.2	104.8	-0.7	-7.3
Stone, Clay, and Glass	2.8	3.0	3.3	-0.2	-0.5
Primary and Fabricated Metals	9.4	9.5	10.0	-0.1	-0.6
Machinery	45.5	45.7	48.3	-0.2	-2.8
Total Non-durable Goods	31.5	31.6	31.0	-0.1	0.5
Food and Kindred Products	7.4	7.5	7.0	-0.1	0.4
Printing and Publishing	11.0	11.0	11.2	0.0	-0.2
Mining and Quarrying	0.8	0.8	0.7	0.0	0.1
Construction	50.0	51.5	51.0	-1.5	-1.0
Service-Producing Industries	800.8	819.1	791.7	-18.3	9.1
Transportation, Communications, and Public Utilities	55.8	56.1	58.9	-0.3	-3.1
Transportation	33.5	33.8	35.6	-0.3	-2.1
Communications and Public Utilities	22.3	22.3	23.3	0.0	-1.0
Trade	247.1	254.9	246.0	-7.8	1.1
Total Wholesale Trade	56.5	57.1	57.3	-0.6	-0.8
Total Retail Trade	190.6	197.8	188.7	-7.2	1.9
General Merchandise and Apparel	32.0	36.0	30.2	-4.0	1.8
Food Stores	32.9	33.2	32.5	-0.3	0.4
Automotive and Service Stations	21.1	21.3	20.7	-0.2	0.4
Eating and Drinking Places	67.4	67.8	67.0	-0.4	0.4
Finance, Insurance, and Real Estate	73.2	73.6	73.7	-0.4	-0.5
Services and Miscellaneous	283.3	286.4	274.7	-3.1	8.6
Hotels and Lodging Places	24.5	25.1	24.8	-0.6	-0.3
Business Services	69.8	71.5	65.1	-1.7	4.7
Health Services	69.8	68.8	67.6	1.0	2.2
Government	141.4	148.1	138.4	-6.7	3.0

Notes and Source: See Table 3

Table 3

Pima County Labor Force, Employment, and Unemployment Data, January 1992[a]

(in Thousands)	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991	Monthly/Yearly Change Dec. '91 - Jan '92	Monthly/Yearly Change Jan. '91 - Jan '92
Total Civilian Labor Force[d]	320.2	320.1	306.4	0.1	13.8
Total Unemployment	19.4	16.8	10.7	2.6	8.7
Unemployment Rate	6.1%	5.2%	3.5%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	6.5%	5.5%	3.7%	—	—
Total Employment	300.8	303.3	295.7	-2.5	5.1
Total Wage and Salary Employment[f, g]	263.0	267.8	252.2	-4.8	10.8
Private Sector	202.3	204.3	197.5	-2.0	4.8
Government	60.7	63.5	54.7	-2.8	6.0
Goods-Producing Industries	40.7	40.9	41.4	-0.2	-0.7
Manufacturing	24.2	24.4	25.5	-0.2	-1.3
Total Durable Goods	19.0	19.2	20.3	-0.2	-1.3
Total Non-durable Goods	5.2	5.2	5.2	0.0	0.0
Mining and Quarrying	2.4	2.4	2.3	0.0	0.1
Construction	14.1	14.1	13.6	0.0	0.5
Service-Producing Industries	222.3	226.9	210.8	-4.6	11.5
Transportation, Communications, and Public Utilities	10.7	10.6	9.1	0.1	1.6
Transportation	6.2	6.1	4.7	0.1	1.5
Communications and Public Utilities	4.5	4.5	4.4	0.0	0.1
Trade	62.6	63.9	61.4	-1.3	1.2
Total Wholesale Trade	9.1	9.0	8.7	0.1	0.4
Total Retail Trade	53.5	54.9	52.7	-1.4	0.8
General Merchandise and Apparel	7.9	8.8	8.1	-0.9	-0.2
Food Stores	8.2	8.4	8.0	-0.2	0.2
Automotive and Service Stations	5.7	5.5	5.4	0.2	0.3
Eating and Drinking Places	18.8	19.3	18.8	-0.5	0.0
Finance, Insurance, and Real Estate	11.6	11.7	11.4	-0.1	0.2
Services and Miscellaneous	76.7	77.2	74.2	-0.5	2.5
Hotels and Lodging Places	6.8	6.8	6.8	0.0	0.0
Business Services	12.0	12.3	10.8	-0.3	1.2
Health Services	23.0	23.1	22.4	-0.1	0.6
Government	60.7	63.5	54.7	-2.8	6.0

Notes:
a) Data on labor force, total unemployment, total employment, and seasonally adjusted unemployment rate should not be used for economic-assistance programs. Data for conomic-assistance programs are available by contacting DES, Research Administration
b) Preliminary and subject to revision following month
c) Revised
d) Adjusted to Current Population Survey (CPS) to reflect place of residence
e) Normal seasonal variations have been eliminated to reflect underlying trends
f) By place of work; does not include agricultural workers, self-employed, unpaid family members, and domestic workers
g) Detail may not add up correctly due to rounding
h) Rounded to the nearest one-quarter

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, February 1992*

Table 4

Non-metropolitan Counties' Labor Force, Employment, and Unemployment Data, January 1992(a,b)

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz
Total Civilian Labor Force(d)	16,250	35,900	43,625	13,850	7,775	3,375	6,200
Total Unemployment	3,325	3,950	5,375	2,050	875	325	875
Unemployment Rate	20.5%	11.0%	12.3%	14.8%	11.4%	9.9%	14.1%
Unemployment Rate (Seasonally Adjusted)(e)	21.4%	11.1%	11.3%	14.3%	11.1%	9.9%	13.8%
Total Employment	12,925	31,950	38,250	11,800	6,900	3,050	5,325
Total Wage and Salary Employment(f,h)	14,925	26,000	39,700	11,825	4,825	3,375	3,625
Private Sector	9,000	15,050	26,975	8,950	3,025	2,850	2,575
Government	5,925	10,950	12,725	2,875	1,800	525	1,050
Goods-Producing Industries	700	2,250	4,425	3,375	400	2,300	550
Manufacturing	475	1,200	2,975	1,525	200	25	200
Mining and Quarrying	25	100	175	1,200	0	1,950	75
Construction	200	950	1,275	650	200	325	275
Service-Producing Industries	14,225	23,750	35,275	8,450	4,425	1,075	3,075
Transportation, Communications, and Public Utilities	1,675	1,525	2,525	450	175	50	175
Trade	1,550	5,500	9,950	2,575	1,475	300	1,175
Finance, Insurance, and Real Estate	350	650	700	250	100	25	125
Services and Miscellaneous	4,725	5,125	9,375	2,300	875	175	550
Government	5,925	10,950	12,725	2,875	1,800	525	1,050

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
Total Civilian Labor Force(d)	39,075	27,800	38,250	12,250	41,325	67,350
Total Unemployment	4,900	4,775	4,750	1,775	4,225	9,875
Unemployment Rate	12.6%	17.2%	12.4%	14.5%	10.2%	14.7%
Unemployment Rate (Seasonally Adjusted)(e)	12.2%	17.1%	13.1%	20.9%	9.7%	24.7%
Total Employment	34,175	23,025	33,500	10,475	37,100	57,475
Total Wage and Salary Employment(f,h)	26,950	20,625	30,700	11,500	28,050	31,175
Private Sector	22,275	14,400	21,275	9,650	22,250	23,150
Government	4,675	6,225	9,425	1,850	5,800	8,025
Goods-Producing Industries	5,150	3,500	8,800	1,275	5,400	3,250
Manufacturing	2,575	1,650	3,025	950	2,350	1,875
Mining and Quarrying	50	1,075	5,125	0	1,075	25
Construction	2,525	775	650	325	1,975	1,350
Service-Producing Industries	21,800	17,125	21,900	10,225	22,650	27,925
Transportation, Communications, and Public Utilities	1,425	1,525	1,025	750	1,025	1,375
Trade	8,400	4,275	5,700	5,525	7,675	10,150
Finance, Insurance, and Real Estate	1,200	500	625	275	950	1,125
Services and Miscellaneous	6,100	4,600	5,125	1,825	7,200	7,250
Government	4,675	6,225	9,425	1,850	5,800	8,025

Notes and Source: See Table 3

Table 5
Estimated Hours and Earnings of Production Workers, by Selected Industry Groups, January 1992[a]

Arizona

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991
Manufacturing	$440.78	$451.94	$424.44	40.7	41.5	40.5	10.83	10.89	10.48
Aircraft and Missiles	653.05	692.85	657.39	45.1	46.5	46.1	14.48	14.90	14.26
Food and Kindred Products	335.54	335.51	355.68	37.2	38.3	38.0	9.02	8.76	9.36
Primary Metals	460.18	479.20	494.76	39.5	39.9	38.0	11.65	12.01	13.02
Machinery	451.07	457.47	401.39	40.6	41.4	39.9	11.11	11.05	10.06
Copper Mining	634.30	638.55	642.54	42.4	43.0	44.1	14.96	14.85	14.57
Construction	444.28	433.78	435.55	36.9	36.3	37.1	12.04	11.95	11.74
Public Utilities	778.30	813.03	772.47	42.6	43.9	44.6	18.27	18.52	17.32
Retail Trade[d]	272.00	275.33	250.85	32.0	32.7	31.2	8.50	8.42	8.04
Wholesale Trade	398.91	414.00	395.90	38.1	38.8	38.4	10.47	10.67	10.31

Maricopa County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991
Manufacturing	$459.89	$476.15	$446.48	41.1	42.4	40.7	11.17	11.23	10.97
Construction	464.62	454.11	462.00	36.7	36.3	37.9	12.66	12.51	12.19
Retail Trade[d]	290.83	296.14	258.71	33.2	34.0	31.9	8.76	8.71	8.11
Wholesale Trade	417.70	429.66	427.48	38.9	39.6	38.1	10.74	10.85	11.22

Pima County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991	Jan. 1992[b]	Dec. 1991[c]	Jan. 1991
Manufacturing	$433.61	$429.87	$389.38	41.1	40.1	38.4	10.55	10.72	10.14
Construction	389.79	384.13	382.67	36.6	35.8	35.4	10.65	10.73	10.81
Public Utilities	658.79	668.95	627.74	41.2	42.5	41.6	15.99	15.74	15.09

Notes:
a) Estimates are based on a sample of full- and part-time production and related workers whose payroll and hours are reported for the pay period that includes the 12th of the month
b) Preliminary and subject to revision following month
c) Revised
d) Excludes eating and drinking places

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, February 1992*

State Expected to Have Moderate Growth

(Continued from page 6)

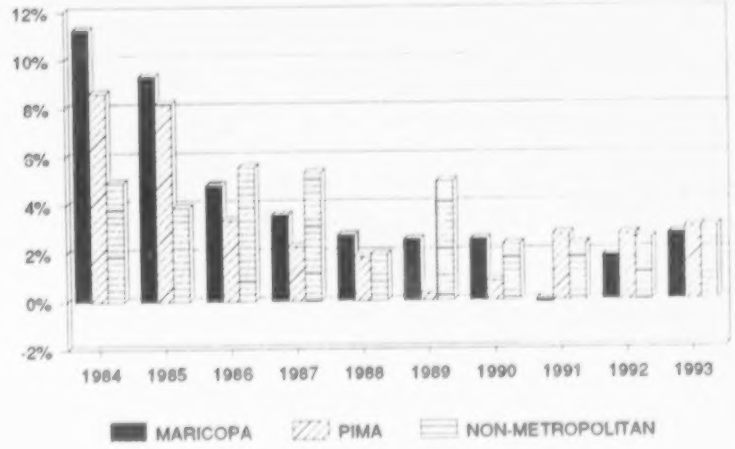
new jobs in the rural counties the next two years. These three major industry groups account for three-fourths of all non-farm payroll employment in the non-metro counties and will add a combined 6,000 jobs in 1992 and 6,400 jobs in 1993.

Mining employment increased by 1,000 in 1991, the direct result of job gains in copper mining. And stable copper prices over the forecast period will continue to generate employment opportunities in the copper mining industry. RA expects to see an additional 500 mining positions created in both the 1992 and 1993 forecast years.

The manufacturing, construction, and FIRE industries in the non-metro counties are each expected to show job losses in 1992. But manufacturing and construction should turn around and have positive job growth in 1993 while FIRE is expected to see little change.

Figure 5

Metropolitan Counties' vs. Non-metropolitan Counties' Wage and Salary Employment Growth Rates, Actual (1984-1991) and Projected (1992, 1993)



Source: Arizona Dept. of Economic Security, Research Administration, February 1992

Total unemployment, as is the case statewide, is expected to grow faster than total employment in 1992, pushing up unemployment rates in the non-metro counties by an overall average of 1.4 percentage points. An expected decline in total unemployment in 1993, however, should help lower the rural counties' average jobless rates to slightly lower levels.

—Dennis Doby
RA Economist

U.S. Economy Will Affect Arizona's Fate

(Continued from page 2)

a modest 2.3 percent in 1992, before picking up to 3.2 percent in 1993. The result is expected sluggish growth for Arizona in the first half of 1992, with both the national and Arizona economies picking up in the second half of the year and through 1993.

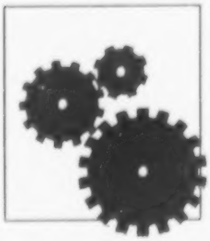
Some of WEFA's other national economic predictions expected to impact the U.S. and Arizona economies include:

- a U.S. monetary policy geared toward lowering short-term interest rates, if there are renewed signs of economic deterioration. Only after recovery takes a firm hold and inflation shows signs of bottoming out, will the Federal Reserve gradually nudge the federal funds rate higher.
- continued declines in real defense spending over the next three years.
- expected higher employment growth starting in the second quarter of 1992, helping to solidify workers' income gains. Once employment growth picks up, workers will be able to sustain close to 3 percent growth in consumption and modestly increase their savings.
- relatively low mortgage interest rates and release of pent-up demand for single family homes, which are expected to sustain the housing recovery. Tight lending policies by banks and an overbuilt multi-family sector will make the current expansion less robust than previous expansions.
- a gradual increase in business investment. As the recovery continues, rising capacity utilization will provide support for continuing equipment outlays by business.

—DES, Research Administration

Phoenix Manufactured-Housing Company Expected to Benefit from Soviet Break-Up

"New Developments" is featured each month as a service to our readers. This section is a compilation of public announcements and articles from newspapers and periodicals about events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of business news is not possible. In addition, the Arizona LMI Newsletter is not responsible for incorrect information reported by these sources.



MANUFACTURING — An end of the Cold War may mean a heating up of employment opportunities for one Valley manufacturer. **CAVCO Industries Inc.** of Phoenix is expected to sign an agreement in May to **make 5,000 prefabricated homes** to house members of the military of the Commonwealth of Independent States — formerly the Soviet Union — recalled from East Germany and the Baltic nations. The estimated $50-$75 million contract **could lead to at least an additional 400 positions** at CAVCO, a company official said.

Boeing Co. has awarded a multi-million dollar contract to **Aircraft Gear Corp. of Chandler** to produce flap transmissions for the Seattle company's new 777 jetliner. Once production is under way, Aircraft Gear is expected to **increase employment by about 15 percent.** The company currently employs about 80 people.

As part of a corporate restructuring plan, Allied-Signal Aerospace Co. continues to make changes in its Garrett divisions in Phoenix, **combining Garrett Engine and Garrett General Aviation Services** into one unit in January. The move is expected to **lead to more layoffs**. Both divisions have cut back employment in recent months, while employment at all of Garrett's Valley operations has dropped from about 13,000 to 10,000 in the past year.

Space Data, a Chandler company that makes products that help propel rockets into space, has been **boosting its employment** of late, thanks to a contract with the government's Strategic Defense Initiative (SDI) program. Space Data, a subsidiary of Orbital Sciences Corp. of Fairfax, Va., has been adding about 30 employees a month to its payroll — primarily engineers and technicians. The company, which is expected to grow about 40 percent this year, employed about 650 workers as of early February.

CONSTRUCTION — Two recently announced projects on the Navajo Indian Reservation should create employment opportunities for the Indian population. First, **Indian Health Services** said its plans to **build a $50-$75 million Fort Defiance Comprehensive Health Care Facility**, expected to open in five years. The new 58-bed hospital, which will replace an existing facility, will offer a wide range of services for Indians and emergency medical service for the general public. The second project, which is unrelated, will include the building of a **100-room hotel near the Canyon de Chelly National Monument**. Ocean Properties Ltd. will build and manage the property, which will create 120 construction jobs and 100 permanent positions in Chinle once the hotel is built.

A major Arizona developer of retirement housing is planning a **5,500-home community in Goodyear** with a projected population of 10,000. **Robson Communities**, which has developed projects such as Sun Lakes in the east Valley, has already begun work on one of three golf courses planned for the $700 million, 2,200-acre project called Pebble Creek. The first homes in Pebble Creek — bounded by Camelback and Thomas roads, and Bullard and Sarival avenues — are expected to be available in the fall.

TRADE — A Phoenix computer mail-order and retail business that has seen its sales grow from $1 million to $100 million in the past five years plans to **expand its product line**. **Insight Distribution Network Inc.** of Tempe, which has focused on computer hardware, now plans to sell software products. Employment at Insight has grown to 200, and the company now ranks 32nd on Arthur Andersen's list of the largest privately held companies in Arizona.

Phoenix-based **Circle K Corp.** has **started closing 86 convenience stores** in 11 states — including nine in Arizona — as part of a plan to shut down 600 locations by summer and eventually 1,600 locations. Currently under bankruptcy protection, Circle K had nearly 4,700 stores in mid-1989, but was down to about 3,800 before the current round of closures.

Another Phoenix company that has had financial difficulties, **Sun Valley Waterbeds**, has made agreements with its creditors and is **coming out of U.S. Bankruptcy Court protection**. Under new management, Sun Valley currently is operating 35 stores and employs 250 people in Arizona and five other states. Before its problems, the Phoenix company had 81 stores and 700 employees in eight states.

SERVICES — The **Colorado Rockies** professional baseball team will **play its spring-training games in Tucson** when it begins its first National League season in 1993, the club announced. The Colorado team will fill a void being left by the Cleveland Indians, who will begin training in Homestead, Fla., next year. The Rockies signed a multi-year deal to play at Hi Corbett Field (the Indians' home), but a new Tucson stadium will be built for the Rockies within the next several years.

NEWS IN BRIEF

State Commerce Department Adds 'Enterprise Zones' in Phoenix, Tucson

Following are brief stories relating to labor issues affecting the nation and Arizona.

The state's Commerce Department announced in February the addition of two new "enterprise zones" in Arizona, one each in Phoenix and Tucson. The enterprise-zone designation allows companies that expand or relocate into those areas up to $5,000 in state income tax credits for hiring disadvantaged workers if those employees meet certain criteria. State enterprise zones are available in 11 areas in the state.

The new enterprise zone in Phoenix is roughly bounded by the Hohokam, Maricopa, and Papago freeways, and 35th Avenue. The central core of Phoenix, however, is excluded. In Tucson, the enterprise zone includes a 43-square-mile area near Tucson International Airport, including the Hughes Aircraft Co. plant and International Business Machines complex. Each city now has two enterprise zones.

To qualify as an enterprise zone, an area must have unemployment or poverty levels 150 percent above the statewide average for the previous two years. To qualify for tax credits, 35 percent of a company's workforce must be made up of persons in federal job-training programs or whose income falls below the poverty level. Besides tax credits, an enterprise-zone designation can also help compnies obtain quicker handling of building permits and access to job-training programs.

The Commerce Department can name up to six areas a year as enterprise zones with a designation lasting up to a maximum of five years. Counties with a population of 500,000 or less can apply to have the whole county designated as an enterprise zone. The state's other enterprise zones include the following areas: all of Yuma, Santa Cruz, Pinal, Greenlee, and Navajo counties; Huachuca City in Cochise County; and a portion of downtown Tempe.

Currently, there is no detailed information available on the number of jobs that have been created by the 2½-year-old program, says Mobin Qaheri, the state's enterprise-zone administrator. But an annual report to the Governor, due out in a couple of months, is expected to provide some employment estimates, and a recent article in *The Phoenix Gazette* said an enterprise zone in south Phoenix has helped create 220 jobs.

Information on the enterprise-zone program is available by contacting the Commerce Department at 280-1321.

Phoenix-based **AutoCare Corp. has purchased 14 Pit Stop Auto Care Centers** in Maricopa County and will operate them under the name of **SpeeDee Oil Change & Tune-Up**. AutoCare expects to add another 16 locations in the Valley over the next three years. SpeeDee Oil Change & Tune-Up stores are part of a franchise based in Metairie, La.

Several **Valley hotel projects have been put on hold or have been slowed down** because of the recession. A $100 million resort at an unspecified site, planned by Guinness Enterprise Holdings of New York City, has been put off indefinitely; a 250-room Four Seasons Resort, to be developed at Troon North in Scottsdale, is still in the early stages of design; and construction of a 1,050-room Scottsdale resort, planned by Herberger Enterprises Inc. of Scottsdale and Woodbine Development Corp. of Dallas, is now four to six years away.

TRANSPORTATION, COMMUNICATIONS and PUBLIC UTILITIES — **American Telephone & Telegraph Co. laid off 107 production workers** at its Phoenix wire and cable factory in February because of declining sales, the company said. It's the second such layoff for AT&T in the past six months. AT&T, which still has about 1,700 employees at its Phoenix plant, laid off 120 workers last fall.

MISCELLANEOUS — **Four companies will receive $1 million in low-interest loans** from the state for relocating or expanding businesses that are expected to **create about 100 jobs**, primarily in rural Arizona. Eurofresh of Ringgold, Pa., will receive a $400,000 loan from the Commerce and Economic Development Commission to start a 10-acre greenhouse near Willcox, expected to employ 40 people; $300,000 will be loaned to Yavapai Block of Prescott to help pay for relocation, which already generated 10 to 15 jobs; a $250,000 loan was given to Monsey Products Co. of Kimberton, Pa., to build a 40,000-square-foot, roof-coating and wallboard plant in Kingman that is expected to employ 30 people by 1994; and a $76,000 loan was given to Signature Industries Inc. of Phoenix, a wholesale furniture manufacturer, that is expected to lead to 16 new jobs.

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ARIZONA ECONOMIC TRENDS

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**April
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BLS Program Goes in Search of Mass Layoffs

Note: In light of the number of major layoffs that have occurred nationally and in Arizona in the past few years, articles in the April and May issues of Arizona Economic Trends will look at several federal/state cooperative programs — overseen by the U.S. Department of Labor — that track mass layoffs and plant shutdowns and attempt to help workers and communities affected by them. The articles will explain the function of these programs, as well as analyze their potential use and effectiveness on a national and statewide basis.

In the April issue, two stories will focus on the Mass Layoff Statistics (MLS) program, an eight-year-old program that tracks and collects data on major layoffs in nearly all states and is administered in Arizona by the Department of Economic Security's Research Administration. Then, the May issue will focus on programs — created by the Economic Dislocation and Worker Adjustment Assistance Act (EDWAA) and the Worker Adjustment and Retraining Notification Act (WARN)_ — that attempt to alert workers and communities to potential layoffs or plant shutdowns and help these unemployed workers make the transition to new jobs.

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MASS
LAYOFFS

MLS Program Overview

The U.S. recession of the early 1980s marked a major turning point in the country's post-World War II economic history. While the nation had had several economic downturns in the previous three decades, the recession of early '80s not only produced high unemployment rates — averaging close to 10 percent — but began exposing severe cracks in the nation's industrial base, particularly in the manufacturing sector. Because of the

RA Changes Name of Newsletter, Spruces Up Look

To paraphrase Jack Webb of "Dragnet" fame: "The names have been changed ... but the facts are essentially the same." So, too, is the case with the monthly publication of the Department of Economic Security's Research Administration. The name has been changed — from ***Arizona Labor Market Information Newsletter*** to ***Arizona Economic Trends*** — but the newsletter is basically the same, except for some minor editorial and cosmetic changes.

What is the purpose of changing the name? There are two primary reasons: to better reflect the content of the publication's articles, which frequently discuss issues outside the traditional concept of labor market information; and since the newsletter was due for a makeover, it made sense to come up with a new nameplate.

Some of the changes the reader should notice include: a new typeface (ITC Garamond) for the body copy, which should make the publication more appealing; new table and graph formats designed for easier reading; new standing heads; and nicely finished paper, which is also recyclable. The reader may find of particular interest additional information in

(continued on back page)

severity of that recession, Congress in 1982 created a program as part of newly created job-training legislation — the Job Training Partnership Act (JTPA) — to track and study the magnitude and impact of U.S. plant closings and mass layoffs.

The Department of Labor's Bureau of Labor Statistics (BLS) was assigned this task and began a pilot project in 1984 involving seven states (including Arizona) to test the feasibility of using state unemployment insurance (U.I.) benefit files to track mass layoffs. It proved successful and by the second quarter of 1985, BLS and about 10 states began officially tracking mass layoffs through this system. By 1991, 48 states and Washington D.C. had joined the program, with all 50 states expected to participate by 1993.

The program was originally called the Permanent Mass Layoff and Plant Closing (PMLPC) program. But the name was changed in 1989 to the Mass Layoff Statistics (MLS) program — as part of a minor overhaul of the program — to more accurately reflect its primary scope and planned changes in the program (see end of story).

The current major objectives of the MLS program are to identify: industries being impacted by mass layoffs; the magnitude and reasons for mass layoffs; geographic locations of mass layoffs; and the continuing financial and employment impact on workers who lose jobs through mass layoffs. The last major goal is accomplished through tracking laid-off workers' U.I. benefit history, such as the length of time U.I. benefits are drawn and whether benefits are exhausted before re-employment.

The MLS program could easily be confused with a more prominent Labor Department program tied to mass layoffs, the Worker Adjustment and Retraining Notification Act (WARN) program. Although both programs use similar criteria for identifying mass layoffs, the purpose and rules covering the two programs are quite different.

> *... the MLS program produces "a wide range of unique data that are not available in any other BLS programs." ... there is a major distinction between the CES and MLS programs in that CES measures net change in industry employment, while MLS looks at gross change.*
>
> *—Lewis Siegel*
> *MLS Program Manager*

The MLS program collects data on mass layoffs that have already occurred or are in the process of occurring, while WARN, started in 1989, is simply an employer-notification program that attempts to provide employees and affected communities with a reasonable notice (at least 60 days) of an expected layoff or plant shutdown as a way to soften the impact of worker dislocation should it actually occur.[1]

How MLS Program Works

The MLS program identifies a mass-layoff event through U.I.'s files of initial claimants. An initial claimant is an individual who has just become unemployed, files for U.I. benefits, and has earned enough wages to qualify for some level of benefit payment (see below).

Currently, each state has the option of tracking mass layoffs of 20 or more or 50 or more workers. Arizona uses the 50+ criteria because state officials believe the lower criteria would likely identify "events" that are inconsistent with the concept of a "mass layoff" as an "unexpected dislocation of a large number of employees."[2]

Depending on the state, an employer who has 20 or more or 50 or more U.I. initial claims filed against them in any given contiguous three-week period is flagged as potentially having had a major layoff. The employer is then contacted — either by telephone (the preferred method) or letter — to determine if a mass layoff had occurred, how many employees were laid off, and the reason(s) for the layoff.

Verification must be obtained directly from the employer, not a secondary source, such as a newspaper. If the employer refuses to cooperate, the employer is considered as having had a mass layoff, even if the number of laid-off employees was below the threshold level needed to qualify as a mass layoff.

Of course, if an employer fails to cooperate, there is a potential source of bias in the collection and interpretation of mass-layoff data. As a result, state agencies make every effort to obtain employer cooperation to ensure that on an aggregate basis, data can be used with confidence by governmental and private agencies, as well as the general public.

Not all categories of U.I. claimants are used to identify an employer as potentially having had a mass layoff. For example, shared-work claimants are not unemployed and, therefore, are excluded from layoff totals.[3] Also, claimants living in Arizona but drawing benefits in another state are excluded, as are strikers unless they subsequently lose their job as a result of the hiring of non-union workers. Included in U.I. claimant totals are workers indirectly affected by a strike.

Also, not all layoffs in the state will be identified as a "mass layoff" by the MLS program because of U.I. claimant eligibility rules; the uncertainty of when, where, and if a claimant will file for benefits; and the manner in which an employer conducts a layoff.

To qualify for benefits, a claimant has to be monetarily eligible, which

(continued on page 5)

Agriculture Gains Larger Share of State's Layoff Events

When analyzing data from the Mass Layoff Statistics (MLS) program, it's important to keep in mind that the MLS program was not designed to act as a general barometer of a state's or the nation's overall economy. Rather, the major purpose of MLS data is to identify sectors of the economy undergoing structural changes that might not be detected by other Department of Labor programs that track labor market trends (e.g., Current Employment Statistics (CES) program).

For example, a rise over the year in Arizona's major MLS categories — layoff events, separations, and initial claims — does not necessarily translate into a worsening economy. Many other factors — such as a increase in seasonal layoffs or temporary employment — can cause growth in MLS categories. Also, caution should be used when trying to compare MLS data with other economic data, say a rise in MLS mass layoff events versus a rise in a Arizona's unemployment rate — there may or may not be a correlation.

One of the best ways then to utilize the MLS program is to analyze its industry and subindustry data, as well as be aware of industry employment practices and other mitigating factors (e.g., oversupply of goods in an industry) that may be affecting an industry's MLS totals. Helping in the evaluation process are the different categories of MLS data (e.g., "reasons for layoff") that BLS breaks out. Several of these categories are presented in tables published with this article.

1990, 1991 Overview

Probably the most significant trend in Arizona's MLS data over the past two years has been the agricultural industry's growing dominance of the state's mass layoffs events and corresponding categories. But ironically, agriculture's increase shares of MLS categories are not due to economic hard times, but rather seasonal layoffs (when a crop season ends) and employment *growth*, particularly in Maricopa and Yuma counties.

Table 1

Arizona Mass-Layoff Events, 1990 and 1991

	Establishments		Layoff Events		New Layoff Events	
	1990	1991	1990	1991	1990	1991
All Industries	69	75	91	92	89	88
Agriculture	21	29	28	38	28	38
Non-agriculture	48	46	63	54	61	50
Manufacturing	18	19	24	19	23	18
Durable Goods	16	14	22	14	21	13
Non-durable Goods	2	5	2	5	2	5
Non-manufacturing	30	27	39	35	38	32
Construction	3	3	5	4	5	4
TCPU(1)	4	8	4	11	4	10
Trade	9	4	9	4	8	4
Services	12	10	17	13	17	12
Government	2	2	4	3	4	2

Note: 1) Transportation, Communications, and Public Utilities

Source: Arizona Dept. of Economic Security, Research Administration, February 1992

In 1988, agriculture accounted for 25 percent of the state's mass-layoff events, 18.1 percent of separations, and 14.1 percent of initial claims. By 1990, however, those shares had grown to 30.8 percent, 29.8 percent, and 28.6 percent, respectively, and last year increased to 41.3 percent, 48.2 percent, and 36.4 percent, respectively. On a national level, with 44 states and the District of Columbia reporting in 1990 (the latest year available), agriculture accounted for only 3.1 percent of layoff events, 4 percent of separations, and 2.5 percent of initial claims.

Looking at totals for the state's major MLS categories in 1991, although the number of mass-layoff events remained stable from the previous year (see Table 1), agriculture is directly attributable for most of the steady growth in MLS separations and initial claims (see tables 2 and 3) in 1991. Arizona's total separations last year rose 13.5 percent over 1990 levels, while initial claims rose 13.4 percent.

However, if agriculture's net increase in those two categories were excluded from Arizona's overall totals, the state's MLS separations for 1991 actually would have dropped, while initial claims would have risen slightly (see tables 2 and 3).

MLS totals for Arizona's manufacturing sector, on the other hand, were relatively unchanged from 1990 to 1991, which was good news considering the state's non-farm wage and salary employment in manufacturing dropped 4.9 percent over that period. Manufacturing's mass-layoff events dropped slightly (19 vs. 24), while the industry's total separations were almost identical and initial claims rose 4.7 percent. The state's sluggish economy — forcing more laid-off workers (separations) to file for unemployment insurance before they could find another job — could account for the difference in growth between the industry's MLS separations and initial claims.

Meanwhile, other industries in the state that showed significant MLS changes — up or down — from 1990 to 1991 included trade; transportation, communications, and public utilities (TCPU); and services. However, the changes in TCPU and services are somewhat misleading because unlike other BLS programs, the MLS program includes data from the U.S. Postal Service in TCPU and the U.S. Bureau of Indian Affairs in services. Employment data from both are normally classified in government in most Bureau of Labor Statistics (BLS) programs.[1]

Trade's MLS separations and initial claims — along with their share of the total separations and claims — in Arizona both dropped by about two-thirds from 1990 to 1991, while layoff events fell by about one-half. There was no particular reason to account for the drop, although there was a slight increase (1.4 percent) in trade non-farm payroll employment in 1991. But the decrease in MLS totals is not terribly significant given that trade only made up a small proportion of those categories in the state both years.

Services had the oddity of having its separations increase nearly 30 percent (992) over the year, while its initial claims fell 11 percent. It's likely that several mass layoffs involving BIA workers — who usually are temporary or school employees, who are less likely to file for unemployment insurance benefits — caused the unusual situation. Services, which normally accounts for the third-highest number of mass-layoff events in the state behind agriculture and manufacturing, had a moderate drop in its layoff events in 1991 — falling from 17 to 13.

Finally at the industry level, TCPU had a significant rise in mass layoffs (from 3 to 12) and initial claims (from 756 to 1,603, or 212 percent) last year, while separations rose 12.3 percent. There are no easily explainable reasons for the difference in growth between initial claims and separations.

Table 2

Arizona Mass-Layoff Separations by Industry, 1990 and 1991

	1990		1991	
	Separations	Percent of Total(1)	Separations	Percent of Total(1)
Total	18,793	100.0%	21,338	100.0%
Agriculture	7,034	37.4	10,288	48.2
Manufacturing	3,378	18.0 (28.7%)	3,379	15.8 (30.6%)
Construction	470	2.5 (4.0)	701	3.3 (6.3)
TCPU(2)	1,623	8.6 (13.8)	1,822	8.5 (16.5)
Trade	1,416	7.5 (12.0)	463	2.2 (4.2)
Services	3,377	18.0 (28.7)	4,369	20.5 (39.5)
Government	1,495	8.0 (12.7)	316	1.5 (2.9)

Notes: 1) Value in parenthesis is percentage of total excluding Agriculture
2) Transportation, Communications, and Public Utilities

Source: Arizona Dept. of Economic Security, Research Administration, February 1992

Table 3

Arizona Mass-Layoff Initial Claims by Industry, 1990 and 1991

	1990		1991	
	Separations	Percent of Total	Separations	Percent of Total
Total	14,813	100.0%	16,910	100.0%
Agriculture	4,243	28.6	6,147	36.4
Manufacturing	3,070	20.7 (29.0%)	3,538	20.9 (32.9%)
Construction	562	3.8 (5.3)	672	4.0 (6.2)
TCPU	756	5.1 (7.2)	1,603	9.5 (14.9)
Trade	1,019	6.9 (9.6)	347	2.1 (3.2)
Services	4,697	31.7 (44.4)	4,175	24.7 (38.8)
Government	466	3.2 (4.4)	428	2.5 (4.0)

Notes: 1) Value in parenthesis is percentage of total excluding Agriculture
2) Transportation, Communications, and Public Utilities

Source: Arizona Dept. of Economic Security, Research Administration, February 1992

Reasons for MLS Events

The MLS program also collects data

on "reasons" for mass layoffs, with MLS employers asked to select one of a predefined set of reasons that account for nearly all situations.[2] Table 8 shows that layoffs due to "seasonal work" accounted for more than one-half of Arizona's 1991 mass-layoff events — about the same as in 1990 — followed by "slack work" with 9, "other reasons" and 'not reported" at 8, and bankruptcy, 5.

The number of mass layoffs due to bankruptcy in 1991 increased significantly over 1990 totals (1) and 1989 (2). There were no Arizona mass layoffs for this reason in 1987 and 1988. Meanwhile, "seasonal work" was responsible for nearly all of layoff events in agriculture.

And finally, the MLS program from time to time collects data on a short-term basis to measure the effects of specific governmental actions. Currently, employers whose business may be defense-related are asked whether their layoffs are all, or in part, caused by actions of Congress to reduce the defense budget.

Six layoff events in 1990 and four in 1991 were related to reductions in the defense budget. The 1990 totals made Arizona one top three states with defense-related mass-layoff events; the other two states were Texas and Massachusetts. (U.S. data for 1991 is still not available.)

—Stan Gorodenski,
Arizona MLS Program Manager

Table 4

Reasons for Arizona Mass-Layoff Separations, 1990 and 1991

	1990		1991	
Reasons	**Layoff Events**	**Separations**	**Layoff Events**	**Separations**
Total, all reasons	91	18,793	93	21,338
Contract completion	6	525	3	334
Domestic relocation	3	211	1	173
Automation	0	0	2	408
Bankruptcy	0	0	5	708
Business ownership changed	0	0	2	308
Overseas relocation	0	0	1	118
Labor-management dispute	0	0	1	152
Plant or machine repairs	0	0	4	1,319
Material shortages	0	0	1	85
Seasonal work	48	10,620	48	13,086
Slack work	10	1,177	9	1,071
Other Reasons	18	5,157	8	1,666
Not reported	6	1,103	8	1,910

Source: Arizona Dept. of Economic Security, Research Administration, February 1992

Notes:

1. BLS' Current Employment Statistics and ES-202 programs normally classify these categories under government employment.
2. Whenever a reason given by an employer does not fit into a predefined list of reasons determined by BLS, "other" is used. Whenever an employer representative either does not know the reason for a layoff or refuses to cooperate, the mass layoff is categorized as "not reported."

BLS Program Searches for Mass Layoffs

(continued from page 2)

means working for at least one employer covered by U.I. laws and having made sufficient wages in the first four of the last five quarters.[4] Thus, if an employer laid off 50 employees and all but one was monetarily eligible, the layoff would not be identified as a mass layoff by the MLS program.[5]

There are other instances where layoffs of 50 or more U.I.-eligible workers are not picked up by the MLS program. One example is when enough of a company's laid-off employees find jobs before filing for U.I. benefits, bringing down the layoff total under the triggering level (50, in the case of Arizona). Another is when layoffs occur over an extended period of time due to the way a business's operations wind down. An employer could lay off 200 employees, but spread it out over three or four months so that total initial claims over any contiguous three-week period never reaches the trigger level. This scenario has occurred a number of times in the history of Arizona's MLS program.

In addition to the initial-claims trigger level, two conditions as part of a layoff event have to be met before a loss of workers is counted as a mass layoff by the MLS program. An employer has to report it laid off at least 50 workers for longer than 30 days. Verification of the number of laid-off workers, also known as separations, and the time period can only come directly from the employer. As a result, layoffs of a substantial number of workers could be excluded from the MLS program, while those of temporary nature could be included in MLS figures.[6]

Another factor determining if a mass-layoff event has occurred is a company's number of physical locations. Some employers have a number of physical locations engaged in the same economic activity (e.g., supermarkets). The MLS program requires that even if one location lays off less than 50 workers, if the aggregated separations over all locations are 50 or more and they are part of the same layoff event, then the employer had a mass layoff.

Finally, in order for a mass-layoff event to qualify as a "plant closing," all the conditions mentioned above have to be met, plus one other requirement: all physical locations in Arizona have to be closed. There have been events during the MLS program's existence where all physical locations were closed, except for administrative offices, and the events were treated as reductions in force rather than plant closings.[7]

MLS Needs Employers' Help

Because information obtained from employers is necessary to the utility and meaningfulness of the MLS program, MLS data are governed under strict BLS confidentiality rules. Only state and federal employees involved in cooperative/state BLS employment security programs are allowed access to employer data.

Also, when mass-layoff data are published in annual reports, it has to be aggregated and presented in a manner so that identification of participating companies cannot be determined.[8] Requests from the public for data that would identify individual employers are turned down because of this rule.

Confidentiality rules, however, do restrict the amount of Arizona data that can be published in the MLS' annual report due to the relatively small number of companies in certain statewide industry groups.[9] Typically, there are only about 25 to 35 mass-layoff events in Arizona each quarter, which can make it more difficult to interpret structural changes occurring in the state's economy.

Selected MLS Terms

Mass Layoff Event — Twenty or more or 50 or more initial claims (depending on the state) for unemployment insurance benefits from an establishment during a consecutive three-week period, with at least 20 or more or 50 or more workers (depending on the state) separated for more than 30 days.

Separation — Layoff of workers by employer, which involves both persons subject to recall and those who are terminated by the establishment.

Initial Claimant — Person who files any notice of unemployment to initiate a request either for a determination of entitlement to and eligibility for compensation, or for a subsequent period of unemployment within a benefit year or period of eligibility.

Additional Uses of MLS Data

Although the primary purpose of the MLS program is to assess industries and areas of the country where structural dislocations are occurring, there are other possible uses for MLS data on a statewide and national basis, according to BLS economist Lewis Siegel, who oversees the MLS program in Washington D.C..

One major use of mass-layoff data for states, Siegel says, is for workforce planning and economic development. For example, when layoffs occur in certain industries or regions of a state, economic-development officials can use that information to attract companies to those areas. This benefits unemployed workers with desired skills and can offer employers a skilled workforce at a more competitive wage.

Another use of MLS data for states — which will be mandated starting in July 1993 — is in determining JTPA funding levels for local areas. If a region of a state is adversely affected by mass layoffs, then more JTPA funding will be required for those areas. The state of Arizona already uses MLS data as one of many factors in determining its local-area JTPA funding.

On a national level, MLS data is already being used for a number of purposes, including testing the effectiveness of other government programs and making employment training and other public officials aware of areas of the economy being impacted by defense cutbacks.

For example, a recently completed BLS study used MLS data to look at employers' layoff and recall practices as one method for determining if DOL funds for retraining laid-off workers are being used effectively. By using MLS data, BLS determined that workers covered in the study "were highly likely to be recalled by their former employers"[10] — thus opening up the possibility that some retraining funds for dislocated workers are being wasted on workers who are later recalled.

Also, because of the reduction in Department of Defense spending, as of 1990 the MLS program began collecting data related to military cutbacks. The MLS program now tracks and provides information in its annual publication on mass-layoff events involving about 10 Standard Industrial Code (SIC)[11] industry groups regarded as defense-related (e.g., guided missiles and space vehicles (SIC 376)). This information is tabulated on a national basis, as well as for the top 100 metropolitan areas.

Future of Program

In 1989, as part of minor overhaul of the MLS program, BLS asked federal and state officials involved with the MLS program for ideas to improve the program. Out of about 100 recommendations, a number of proposals were adopted by BLS and will be implemented starting in July 1993. Among these are:

- developing a PC-based system that can be run by all states — currently each state runs its own program — that will collect more socio-

(continued on page 15)

Jobless Rate Fell to 8.3% in February as Entrants Contracted

In the last few months, Arizona's seasonally adjusted unemployment rate has moved up sharply. The rate's rapid run-up can be attributed to the flow of new and re-entrant job seekers into the labor market.

But just as quickly as Arizonans have entered the labor force, data from the Current Population Survey (CPS) for February indicate that they have begun to exit. Arizona's seasonally adjusted unemployment rate last month was 8.3 percent, down from a revised January level of 8.8 percent. In Maricopa County the unemployment rate fell from 8.2 to 7.7 percent, while Pima County's rate fell from 6.2 percent to 5.8 percent.

ARIZONA'S WORKFORCE

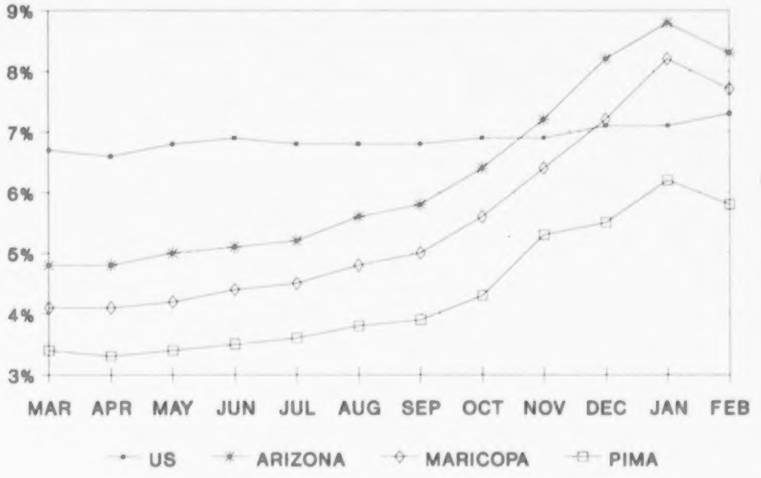
The number of people unemployed also declined over the month. There were 8,100 fewer unemployed in February than in January, according to the household survey. Total persons unemployed, while down, is still at the high level of 142,200.

For the fifth-straight month, new and re-entrant job seekers were a significant influence on the labor market. But the combination of unemployed individuals finding work and new and re-entrant job seekers exiting the labor market helped to decrease total unemployment from January's level.

Arizona's non-farm wage and salary employment in February climbed 14,000, only about 3,500 less than has been average over the last 10 years. And with non-farm payroll employment at 1,508,700 in February, Arizona continues to experience positive over-the-year job growth (up 12,700).

Figure 1

U.S., Arizona, Maricopa County, and Pima County Unemployment Rates (Seasonally Adjusted), March 1991-February 1992



Source: Arizona Dept. of Economic Security, Research Administration, March 1992

The Tucson metropolitan area (Pima County) and the rural counties continued to carry the state to positive over-the-year wage and salary job growth. However, the Phoenix metropolitan area (Maricopa County) continues to have over-the-year negative payroll job growth, although the rate of loss decreased last month.

Despite a 6,600 gain in February, Maricopa County had 4,000 fewer jobs than 12 months earlier. The Phoenix metro area's gain was about half the 10-year average. Structural and cyclical changes plague the Phoenix area's economy as it continues to absorb its proportionate share of national defense cutbacks.

Goverment Has Average Growth

As always in February, the major contributor to job gains statewide was the government sector, chiefly among schools as the second semester began. The 11,200 gain was just more than the 10-year February average. All other major industry groups that gained employment had less-than-seasonal gains.

Services, the largest growth contributor in February after government, added 3,800 jobs, about half its 10-year average seasonal gain. Weak growth occurred in lodging services (up 600 when 1,100 is normal), but health services was little better (up 500 when 700 is average). Business services performed up to its 10-year average, posting 1,600 new jobs.

Major industry groups that lost jobs in February included retail trade, manufacturing, and construction.

Weather played a significant role in holding down construction employment. The undesert-like frequent rains, which promise best-in-many-years desert flower blooms, kept many construction projects from sprouting. Housing sales and building-permit increases portend improved construction employment in the near future, but Mother Nature has to cooperate.

Manufacturing had its largest February loss in eight years, dropping 700. Aircraft and missile manufacturers contributed 400 of the loss, nearly all of which was in Maricopa County. These losses are part of the "peace dividend" and the economy's structural change to which it will have to adapt even after business-cycle recovery is well under way.

Statewide, 3,800 aircraft and missile factory jobs have been lost since

(continued on back page)

Table 1

Arizona Labor Force, Employment, and Unemployment Data, February 1992[a]

(In Thousands)

	Feb. 1992[b]	Jan. 1992[c]	Feb. 1991	Monthly/Yearly Change Jan. '92 - Feb. '92	Monthly/Yearly Change Feb. '91 - Feb. '92
Total Civilian Labor Force[d]	1721.9	1731.0	1681.6	-9.1	40.3
Total Unemployment	142.2	150.3	78.2	-8.1	64.0
Unemployment Rate	8.3%	8.7%	4.7%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	8.3%	8.8%	4.8%	—	—
Total Employment	1579.7	1580.7	1603.4	-1.0	-23.7
Total Wage and Salary Employment[f, g]	1508.7	1494.7	1496.0	14.0	12.7
Private Sector	1223.6	1220.8	1220.6	2.8	3.0
Government	285.1	273.9	275.4	11.2	9.7
Goods-Producing Industries:	259.3	260.4	267.8	-1.1	-8.5
Manufacturing	170.3	171.0	179.5	-0.7	-9.2
Total Durable Goods	126.4	127.0	135.8	-0.6	-9.4
Stone, Clay, and Glass	5.1	5.0	5.5	0.1	-0.4
Primary and Fabricated Metals	13.6	13.7	14.1	-0.1	-0.5
Primary Metals	5.7	5.8	5.9	-0.1	-0.2
Fabricated Metals	7.9	7.9	8.2	0.0	-0.3
Machinery	53.2	53.3	57.3	-0.1	-4.1
Aircraft and Missiles	24.0	24.4	27.8	-0.4	-3.8
Lumber and Wood Products (Excluding Furniture)	6.3	6.4	6.2	-0.1	0.1
Total Nondurable Goods	43.9	44.0	43.7	-0.1	0.2
Food and Kindred Products	10.2	10.3	9.6	-0.1	0.6
Printing and Publishing	15.5	15.5	15.9	0.0	-0.4
Mining and Quarrying	14.0	14.0	13.2	0.0	0.8
Copper Mining	11.6	11.6	10.8	0.0	0.8
Construction	75.0	75.4	75.1	-0.4	-0.1
Service-Producing Industries:	1249.4	1234.3	1228.2	15.1	21.2
Transportation, Communications, and Public Utilities	80.0	79.7	81.0	0.3	-1.0
Transportation	45.6	45.7	46.0	-0.1	-0.4
Communications and Public Utilities	34.4	34.0	35.0	0.4	-0.6
Trade	374.5	374.8	370.9	-0.3	3.6
Total Wholesale Trade	75.3	75.0	74.1	0.3	1.2
Total Retail Trade	299.2	299.8	296.8	-0.6	2.4
General Merchandise and Apparel	50.0	50.5	48.3	-0.5	1.7
Food Stores	51.5	51.7	50.5	-0.2	1.0
Automotive and Service Stations	34.2	34.3	33.4	-0.1	0.8
Eating and Drinking Places	104.4	103.8	105.2	0.6	-0.8
Finance, Insurance, and Real Estate	91.6	91.5	92.4	0.1	-0.8
Services and Miscellaneous	418.2	414.4	408.5	3.8	9.7
Hotels and Lodging Places	40.3	39.7	40.9	0.6	-0.6
Business Services	86.4	84.8	80.9	1.6	5.5
Health Services	108.0	107.5	105.1	0.5	2.9
Government	285.1	273.9	275.4	11.2	9.7
Federal	45.0	45.0	44.1	0.0	0.9

Notes and Source: See Table 3

Table 2

Maricopa County Labor Force, Employment, and Unemployment Data, February 1992(a)

(In Thousands)

	Feb. 1992(b)	Jan. 1992(c)	Feb. 1991	Monthly/Yearly Change Jan. '92 - Feb. '92	Monthly/Yearly Change Feb. '91 - Feb. '92
Total Civilian Labor Force(d)	1051.0	1057.8	1044.7	-6.8	6.3
Total Unemployment	77.7	82.7	41.8	-5.0	35.9
Unemployment Rate	7.4%	7.8%	4.0%	—	—
Unemployment Rate (Seasonally Adjusted)(e)	7.7%	8.2%	4.2%	—	—
Total Employment	973.3	975.1	1002.9	-1.8	-29.6
Total Wage and Salary Employment(f, g)	984.7	978.1	988.7	6.6	-4.0
Private Sector	700.1	696.3	709.5	3.8	-9.4
Government	146.2	141.9	144.0	4.3	2.2
Goods-Producing Industries:	177.8	1[illegible].4	185.2	-0.6	-7.4
Manufacturing	127.4	127.8	134.8	-0.4	-7.4
Total Durable Goods	96.0	96.3	130.7	-0.3	-34.7
Stone, Clay, and Glass	2.9	2.9	3.2	0.0	-0.3
Primary and Fabricated Metals	9.4	9.4	9.8	0.0	-0.4
Machinery	44.2	44.3	47.8	-0.1	-3.6
Total Nondurable Goods	31.4	31.5	31.1	-0.1	0.3
Food and Kindred Products	7.3	7.4	7.0	-0.1	0.3
Printing and Publishing	11.0	10.9	11.1	0.1	-0.1
Mining and Quarrying	0.7	0.7	0.7	0.0	0.0
Construction	49.7	49.9	49.7	-0.2	0.0
Service-Producing Industries:	806.9	799.7	803.5	7.2	3.4
Transportation, Communications, and Public Utilities	55.7	55.6	58.4	0.1	-2.7
Transportation	33.3	33.3	35.3	0.0	-2.0
Communications and Public Utilities	22.4	22.3	23.1	0.1	-0.7
Trade	247.2	247.4	248.0	-0.2	-0.8
Total Wholesale Trade	56.8	56.6	57.4	0.2	-0.6
Total Retail Trade	190.4	190.8	190.6	-0.4	-0.2
General Merchandise and Apparel	32.3	32.5	30.9	-0.2	1.4
Food Stores	32.7	33.0	32.9	-0.3	-0.2
Automotive and Service Stations	21.1	21.1	20.7	0.0	0.4
Eating and Drinking Places	67.4	67.1	68.4	0.3	-1.0
Finance, Insurance, and Real Estate	73.2	73.0	73.9	0.2	-0.7
Services and Miscellaneous	284.6	281.8	279.2	2.8	5.4
Hotels and Lodging Places	24.8	24.5	25.6	0.3	-0.8
Business Services	70.0	68.6	65.6	1.4	4.4
Health Services	69.8	69.5	68.3	0.3	1.5
Government	146.2	141.9	144.0	4.3	2.2

Notes and Source: See Table 3

Table 3

Pima County Labor Force, Employment, and Unemployment Data, February 1992(a)

(In Thousands)

	Feb. 1992(b)	Jan. 1992(c)	Feb. 1991	Monthly/Yearly Change Jan. '92 - Feb. '92	 Feb. '91 - Feb. '92
Total Civilian Labor Force(d)	320.2	320.1	306.3	0.1	13.9
Total Unemployment	19.4	16.8	10.6	2.6	8.8
Unemployment Rate	6.1%	5.2%	3.5%	—	—
Unemployment Rate (Seasonally Adjusted)(e)	6.5%	5.5%	3.6%	—	—
Total Employment	300.8	303.3	295.7	-2.5	5.1
Total Wage and Salary Employment(f, g)	263.0	267.8	252.2	-4.8	10.8
Private Sector	202.3	204.3	197.5	-2.0	4.8
Government	60.7	63.5	54.7	-2.8	6.0
Goods-Producing Industries:	40.7	40.9	41.4	-0.2	-0.7
Manufacturing	24.2	24.4	25.5	-0.2	-1.3
Total Durable Goods	19.0	19.2	20.3	-0.2	-1.3
Total Nondurable Goods	5.2	5.2	5.2	0.0	0.0
Mining and Quarrying	2.4	2.4	2.3	0.0	0.1
Construction	14.1	14.1	13.6	0.0	0.5
Service-Producing Industries:	222.3	226.9	210.8	-4.6	11.5
Transportation, Communications, and Public Utilities	10.7	10.6	9.1	0.1	1.6
Transportation	6.2	6.1	4.7	0.1	1.5
Communications and Public Utilities	4.5	4.5	4.4	0.0	0.1
Trade	62.6	63.9	61.4	-1.3	1.2
Total Wholesale Trade	9.1	9.0	8.7	0.1	0.4
Total Retail Trade	53.5	54.9	52.7	-1.4	0.8
General Merchandise and Apparel	7.9	8.8	8.1	-0.9	-0.2
Food Stores	8.2	8.4	8.0	-0.2	0.2
Automotive and Service Stations	5.7	5.5	5.4	0.2	0.3
Eating and Drinking Places	18.8	19.3	18.8	-0.5	0.0
Finance, Insurance, and Real Estate	11.6	11.7	11.4	-0.1	0.2
Services and Miscellaneous	76.7	77.2	74.2	-0.5	2.5
Hotels and Lodging Places	6.8	6.8	6.8	0.0	0.0
Business Services	12.0	12.3	10.8	-0.3	1.2
Health Services	23.0	23.1	22.4	-0.1	0.6
Government	60.7	63.5	54.7	-2.8	6.0

Notes:
a) Data on labor force, total unemployment, total employment, and seasonally adjusted unemployment rate should not be used for economic-assistance programs. Data for conomic-assistance programs are available by contacting DES, Research Administration
b) Preliminary and subject to revision following month
c) Revised
d) Adjusted to Current Population Survey (CPS) to reflect place of residence
e) Normal seasonal variations have been eliminated to reflect underlying trends
f) By place of work; does not include agricultural workers, self-employed, unpaid family members, and domestic workers
g) Detail may not add up correctly due to rounding
h) Rounded to the nearest one-quarter

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, March 1992*

Table 4

Non-metropolitan Counties' Labor Force, Employment, and Unemployment Data, February 1992[a,b]

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz
Total Civilian Labor Force[d]	16,275	36,150	44,375	13,675	8,000	3,375	6,375
Total Unemployment	3,200	3,975	5,100	1,975	775	325	875
Unemployment Rate	19.6%	11.0%	11.5%	14.5%	9.6%	9.9%	13.9%
Unemployment Rate (Seasonally Adjusted)[e]	19.9%	10.2%	10.8%	13.2%	9.4%	9.9%	13.0%
Total Employment	13,075	32,175	39,275	11,700	7,225	3,050	5,500
Total Wage and Salary Employment[f,h]	15,350	26,625	41,000	11,800	5,275	3,425	3,650
Private Sector	9,400	14,975	27,625	8,750	3,075	2,875	
Government	5,950	11,650	13,375	3,050	2,200	550	1,075
Goods-Producing Industries	675	2,200	4,325	3,200	400	2,300	
Manufacturing	475	1,125	2,950	1,400	200	25	200
Mining and Quarrying	25	75	175	1,150	0	1,975	75
Construction	175	1,000	1,200	650	200	300	250
Service-Producing Industries	14,675	24,425	18,925	8,600	4,875	1,125	3,125
Transportation, Communications, and Public Utilities	1,650	1,475	2,750	475	150	50	175
Trade	1,675	5,500	10,100	2,550	1,500	325	1,200
Finance, Insurance, and Real Estate	350	625	675	250	125	25	125
Services and Miscellaneous	5,050	5,175	9,775	2,275	900	175	550
Government	5,950	11,650	13,375	3,050	2,200	550	1,075

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
Total Civilian Labor Force[d]	38,725	27,725	39,025	12,175	40,625	65,050
Total Unemployment	4,775	4,875	4,800	1,775	4,150	9,625
Unemployment Rate	12.3%	17.6%	12.3%	14.6%	10.2%	14.8%
Unemployment Rate (Seasonally Adjusted)[e]	11.4%	16.4%	12.3%	20.6%	9.2%	21.1%
Total Employment	33,950	22,850	34,225	10,400	36,475	55,425
Total Wage and Salary Employment[f,h]	27,200	20,700	31,725	11,475	27,875	31,700
Private Sector	22,325	14,350	21,600	9,575	22,275	23,225
Government	4,875	6,350	10,125	1,900	5,600	8,475
Goods-Producing Industries:	5,100	3,325	8,925	1250	5,250	3,225
Manufacturing	2,625	1,575	2,950	950	2,325	1,900
Mining and Quarrying	50	1,050	5,275	0	1,050	25
Construction	2,425	700	700	300	1,875	1,300
Service-Producing Industries:	22,100	17,375	22,800	10,225	22,625	28,475
Transportation, Communications, and Public Utilities	1,400	1,475	1,000	775	1,000	1,375
Trade	8,450	4,225	5,800	5,425	7,825	10,250
Finance, Insurance, and Real Estate	1,200	525	575	250	900	1,075
Services and Miscellaneous	6,175	4,800	5,300	1,875	7,300	7,300
Government	4,875	6,350	10,125	1,900	5,600	8,475

Notes and Source: See Table 3

Table 5
Estimated Hours and Earnings of Production Workers, by Selected Industry Groups, February 1992(a)

Arizona

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	**Feb. 1992(b)**	**Jan. 1992(c)**	**Feb. 1991**	**Feb. 1992(b)**	**Jan. 1992(c)**	**Feb. 1991**	**Feb. 1992(b)**	**Jan. 1992(c)**	**Feb. 1991**
Manufacturing	$441.05	$440.64	$418.95	40.8	40.8	39.9	$10.81	$10.80	$10.50
Aircraft and Missiles	662.63	653.05	645.65	45.2	45.1	45.5	14.66	14.48	14.19
Food and Kindred Products	355.81	335.54	352.30	38.3	37.2	38.8	9.29	9.02	9.08
Primary Metals	473.11	466.48	491.34	39.1	39.7	38.0	12.10	11.75	12.93
Machinery	439.56	448.54	396.87	40.7	41.0	39.1	10.80	10.94	10.15
Copper Mining	669.37	642.85	640.20	44.3	43.0	44.0	15.11	14.95	14.55
Construction	436.76	445.38	431.88	35.8	36.9	36.6	12.20	12.07	11.80
Public Utilities	756.58	776.60	741.31	41.8	42.6	43.2	18.10	18.23	17.16
Retail Trade(d)	275.93	272.43	253.26	32.5	31.9	31.5	8.49	8.54	8.04
Wholesale Trade	409.34	391.23	390.91	38.4	37.8	38.1	10.66	10.35	10.26

Maricopa County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	**Feb. 1992(b)**	**Jan. 1992(c)**	**Feb. 1991**	**Feb. 1992(b)**	**Jan. 1992(c)**	**Feb. 1991**	**Feb. 1992(b)**	**Jan. 1992(c)**	**Feb. 1991**
Manufacturing	$458.56	$457.73	$442.26	41.2	41.2	40.5	$11.13	$11.11	$10.92
Construction	466.26	469.90	460.60	36.2	37.0	37.6	12.88	12.70	12.25
Retail Trade(d)	300.69	293.82	264.13	33.9	33.2	31.9	8.87	8.85	8.28
Wholesale Trade	423.93	409.06	424.13	39.0	38.7	37.7	10.87	10.57	11.25

Pima County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	**Feb. 1992(b)**	**Jan. 1992(c)**	**Feb. 1991**	**Feb. 1992(b)**	**Jan. 1992(c)**	**Feb. 1991**	**Feb. 1992(b)**	**Jan. 1992(c)**	**Feb. 1991**
Manufacturing	$417.30	$425.97	$384.68	39.0	40.3	38.7	$10.70	$10.57	$ 9.94
Construction	397.84	396.68	370.36	36.2	36.9	33.7	10.99	10.75	10.99
Public Utilities	649.65	655.02	619.24	41.3	41.3	41.2	15.73	15.86	15.03

Notes:
a) Estimates are based on a sample of full- and part-time production and related workers whose payroll and hours are reported for the pay period that includes the 12th of the month
b) Preliminary and subject to revision following month
c) Revised
d) Excludes eating and drinking places

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, March 1992*

Industry Update

"Industry Update" — featured each month as a service to our readers — is a compilation of public announcements and articles from newspapers and periodicals about business events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of industry news is not feasible. In addition, Arizona Economic Trends is not responsible for incorrect information reported by these sources.

Manufacturing

Honeywell Commercial Flight Systems Group in Phoenix announced in March it will **reduce its workforce by 500** over the next several months due to a slump in the airline-manufacturing industry. The planned cutbacks follow a job reduction of 450 last November. The Commercial Flight Systems Group, which makes navigational systems for aircraft, employs about 6,500 in the Valley.

Allied-Signal Inc. of Morristown, N.J., plans to consolidate its computer and bill-paying operations from around the country, **bringing about 220 jobs to Tempe**. Most of the incoming positions will involve relocations. The employment gains, however, are in contrast with recent layoffs — numbering in the hundreds — by several Garrett aircraft manufacturing divisions in Phoenix and Tucson, which are subsidiaries of Allied-Signal.

Tucson-based **Burr-Brown Corp. laid off 160 workers** in March at its Tucson manufacturing operations due to slack work. The producer of electronic components, which now employs about 950 workers, also laid off 220 workers last November.

Grabert Systems, a developer and marketer of software for AutoCAD design systems, **shut down its Scottsdale operations** in March. A subsidiary of Berlin-based Grabert Systemhaus, an AutoCAD software developer, the company had employed 15 people.

Pending zoning approval, construction will begin in May in Scottsdale on a **$5 million, 55,000-square-foot corporate headquarters for Manufacturing & Consulting Services Inc.** The company designs computer systems for computer-aided design drafting and manufacturing.

Construction

Yavapai County supervisors have **approved plans for several major projects**, including a guest ranch on 25 acres near Kirkland, called Town of Muleshoe. The guest ranch will include 50 cottages clustered in theme neighborhoods and an Old West main street with a hotel, restaurant, saloon, and several stores. Also approved were expansion plans for the Villages of Lynx Creek near Dewey and Lynx Mountain View Estates east of Prescott. Plans for Villages of Lynx Creek call for spaces for 100 recreational vehicles, 147 manufactured homes and four commercial lots.

Site-preparation work was expected to begin in early April on **Arrowhead Towne Center** at 83rd Avenue and Bell Road in Glendale. Developer Westcor Partners says the mall will have 1.3 million square feet of space — slightly smaller than MetroCenter — and include five major department stores when its expected to open in October 1993. The mall should create 7,000 construction and retail jobs.

Trade

Seattle-based Nordstrom's opened a **Last Chance Bargains Shoes and Apparel store** at the Maryvale Mall in west Phoenix in late April. The 26,000-square-foot store offers large discounts on unsold merchandise from its 68 department stores across the country. No information is available about job opportunities.

Several major chains have plans or are in the process of **opening stores in Flagstaff**. Mesa-based Mega Foods, a discount grocery chain, is currently renovating a former Kmart store on Fourth Street and is expected to be finished sometime in May. Toys 'R' Us, meanwhile, expects to break ground on a new store near Flagstaff Mall by July and be open by November, while work on a building to house a PACE Membership Warehouse, a retail discount company, should get under way as soon as final zoning is approved on land near Butler Avenue and Enterprise Road.

Charlotte Russe, a women's specialty chain based in San Diego, is **contemplating expanding** the number of Valley stores from three to six and opening a location in Tucson. Also, the company is looking at locating a distribution center in Arizona.

Fast-food chain **Taco John's International Inc.** plans to open eight restaurants in the Valley over the next two years. The Mexican-restaurant group is based in Wyoming.

A **new Mitsubishi automobile dealership**, partly owned by former NBA star Sidney Moncrief, has opened in Glendale near Glendale and 43rd avenues

Finance, Insurance, and Real Estate

As expected, the **Federal Reserve in March approved the merger of BankAmerica Corp. and Security Pacific Corp.**, parent companies of BankAmerica Arizona and Security Pacific Bank Arizona, respectively. The combined company, BankAmerica, will lead to the elimination of 211 bank branches in five states (49 in Arizona) and a downsizing in workforce (12,000 nationally and an estimated several hundred in Arizona). Prior to Valley National Bank's merger announcement in early April (see next month's issue), this merger was expected to create the largest bank in Arizona.

Charles Schwab Corp., a discount-brokerage company, announced it will **open two offices in Phoenix employing about 170 people**. The San Francisco-based financial-services company plans to open a communications center (150 workers) by the end of 1992 and a data-processing center (20) by early next year.

The largest commercial real estate brokerage company in Canada, **Colliers Macaulay Nicolls Ltd.** of Vancouver, British Columbia, has **purchased majority interest in two Phoenix real estate companies**, Lyon Commercial Brokerage Co. and Camidor Property Management. Colliers Macaulay Nicolls, which has 14 offices in Canada and the United States employing 500 people, plans to invest $500,000 to $750,000 to upgrade the Phoenix operation and attract international investors.

The **Phoenix office of Pruco Life Insurance** Co., a subsidiary of Prudential Insurance Co. of America, will be **shut down by the end of 1992**, forcing the layoff or transfer of 161 employees. The Phoenix operations, which include selling life insurance and annuities, will be shifted to other Prudential offices around the country. The move will not affect 350 employees of Prudential Property and Casualty Co. in Scottsdale.

The **Arizona Stock Exchange**, the state's first, **began operations in late March** at 24th Street and Highland Avenue in Phoenix. Formerly Wunsch Auction Systems Inc. of New York, the exchange features trading on 3,300 public companies and is expected to help bring more equity capital to Arizona companies.

Services

Between **160 and 180 jobs** are expected to be created by the opening of a **new acute-care hospital planned in downtown Phoenix** by October. The long-term care facility, the second in downtown Phoenix for Louisville, Ky.-based **Vencor Inc.**, is expected to hire nurses and therapists, as well as clerical, maintenance, and housekeeping personnel.

Because of its growing population and number of cardiologists, **OmniMed Inc.** of Livonia, Mich., has chosen **Kingman as a site for a heart catheterization facility**. The facility, which allows doctors to diagnose if patients have blockages in heart arteries, will be one of only about 30 such operations in the country. No information is available on potential employment.

In the five years since it opened, **Mayo Clinic Scottsdale** has increased the number of its physicians from 47 to 105 and its **overall staff has grown to 900**. And when an expansion project at Mayo's facility is complete in June — increasing space from 170,000 to 300,000 square feet — an additional 15 doctors should be added, which should eventually lead to an additional 100 support staff.

Bad times have meant good times for **FM Services Corp.**, a **Phoenix collection agency** that has grown to more than 750 employees since it opened for business in 1988. And if FM is a good barometer of the economy, the bad times won't be over soon. FM began hiring more than 100 additional collection agents in March.

About **1,800 people interviewed** in early April for about 300 part-time and full-time positions needed to operate the new **America West Arena** in downtown Phoenix. Jobs ranged from security guards to ushers and are expected to pay between $5 and $6 an hour. The arena will host Phoenix Suns games and about 110 other events a year, beginning in June.

Transportation, Communications, and Public Utilities

America West Airlines recalled 120 customer-service agents in March, about 70 in Phoenix and 50 in Las Vegas. The Phoenix-based air carrier laid off about 250 workers last year in connection with filing for Chapter 11 Bankruptcy Court protection. America West reportedly has about 2,300 customer-service workers, who perform a variety of tasks from servicing flights to selling tickets.

Mining

Asarco Inc. is putting the finishing touches on its **new ore-concentrating mill at its Ray mining complex** in Kearney. The $100 million facility, expected to increase copper output by one-half to 1 million pounds a day, is part of a $324 million expansion project that includes a new crusher and conveyor-belt system, 22 giant trucks, two electric shovels, and other facilities. Most of the 300 additional workers needed for the entire project have already been hired.

Cyprus Minerals Co. is moving 40 of its corporate headquarters employees from Denver to Phoenix to be closer with its copper mining operations in Arizona. Cyprus Minerals employes about 3,000 workers at its mines in this state.

Government

A **reorganization of the Resolution Trust Corp. (RTC)**, the federal agency designated to dispose of assets from failed thrifts, could lead to the **elimination of several hundred jobs** in Phoenix in the next six months. But RTC employees aren't likely to lose their jobs until the end of 1993, said an RTC spokesperson, because of $8 billion in assets in the Phoenix area still not sold. However, 700 Federal Deposit Insurance Corp. (FDIC) employees (30 in Phoenix) on loan to the RTC are expected to be reassigned shortly to the FDIC.

Miscellaneous

In terms of **number of bankruptcies**, the **Arizona district still ranked high** among other regions of the country in 1991. But the state, which had about 20,000 bankruptcies in 1991, ranked 12th in total growth last year, compared to seventh in 1990. Nationally, there were about 945,000 bankruptcies filed, a 20.6 percent increase, while Arizona's total increased 8.7 percent, its lowest percentage gain since 3 percent in 1984.

A **survey by Manpower Inc.** indicates that **job prospects in the Valley during the second quarter of 1992 will be weak** with only 10 percent of Phoenix-area companies indicating plans to hire workers, while 20 percent say they will be laying off employees. Industries with the best opportunities for jobs include manufacturing and the combined group of transportation and public utilities, while areas showing the least promise are finance, insurance, and real estate (FIRE); education; and public administration.

BLS Program Searches for Mass Layoffs

(continued from page 6)

economic data on U.I. initial claimants, such as ethnic groups, older workers, and veterans.

- extending the time period — from three to five contiguous weeks — for initial claims on a company to qualify as a mass-layoff event, in order to capture layoffs that currently may be missed.
- offering more information on an establishment's employment level prior to layoffs or a plant closing, and specifying areas within companies laying off workers or shutting down.

But despite the planned changes, it should be pointed out that a cloud of uncertainty hangs over the MLS program. In all but one year of its eight-year history, funding for the MLS program has been left out of the President's budget, while Congress has voted to keep the program going. And the same scenario is expected to be played out for the 1992-93 federal budget year, which begins October 1.

Opponents of the MLS program claim that much of the information produced can be deduced from other BLS labor-market programs that track employment and industry detail, such as the Current Employment Statistics (CES) and Current Population Survey (CPS) programs. Also, MLS opponents say that because California has not been incorporated into the program — due to problems programming their U.I. system to collect mass-layoff data — the MLS program is missing about 10 percent of the covered workforce, thus diluting the meaning of the data on a national basis. And finally, it's argued that in tight budgetary times the MLS program and its annual cost of about $6 million ranks low on the priority list of BLS programs.

Siegel, however, counters the first argument by saying that the MLS program produces "a wide range of unique data that are not available in any other BLS programs." For instance, Siegel says there is a major distinction between the CES and MLS programs in that CES measures *net change* in industry employment, while MLS looks at *gross change*. By looking at gross change, employment fluctuations and industry trends are much easier to detect, Siegel says.

In addition, Siegel says that the MLS program has persevered despite its tenuous history. Siegel says the uncertainty of the MLS program's fate over the years has made implementation of the program — in terms of planning, MLS employee morale, and bringing all states on-line — a more difficult process than if the program had been supported all along.

So, what is the MLS program's likely fate? Siegel and an official in the Office of Management and Budget (OMB), which prepares the President's budget, believe the MLS program will likely end up being part of next year's budget. In addition, the OMB official believes there's a good chance funding of the program will be made permanent.

—Stan Gorodenski,
Arizona MLS Program Manager

Also contributing to this story was Brent Fine, Arizona Economic Trends Editor

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Notes:

1. Specific information on the WARN program will be given in the May issue of *Arizona Economic Trends*.
2. It is common operating practice for agricultural companies in the state to temporarily hire large numbers of migrant workers, who then move on to another crop — either in Arizona or another state — when the crop season ends. Even using the 50+ criteria, Arizona's MLS program picks up a good number of layoff events that are seasonal in nature. Had Arizona chosen the 20+ criteria, more of these types of layoffs would be picked up by the MLS program and greatly distort the meaning of the overall and industry breakdown of mass layoffs in Arizona.
3. Shared-work claimants have not been laid off, but have had their work hours reduced by at least 10 percent, but not more than 40 percent. Shared-work claimants receive a percentage of their unemployment insurance benefits based on the percentage that their normal weekly work hours have been reduced.
4. Monetarily eligible claimants are determined by one of two factors: either they have earned at least $1,000 in their highest earnings quarter and total earnings over four quarters have equaled or exceeded 1.5 times the high quarter earnings; or they have earned at least $7,000 in the total base period (first four of the last five quarters) and have earnings in at least two of the quarters.
5. This type of situation may occur when a company employs a large number of "new entrants" into the labor force (e.g., recent college graduates), who have a greater likelihood of not qualifying for U.I. benefits due to insufficient wages.
6. For example, if 100 initial claims were filed against an employer, but the employer states only 49 employees had been laid off (separated), then the layoff event is not considered a mass-layoff event for MLS program purposes. Similarly, the MLS program does not count a layoff event if an employer lays off 50 employees but recalls one on the 30th day. Conversely, there have been instances of employees being laid off for a short time period (such as six weeks) due to plant maintenance and repair, but because the recall date exceeded 30 days the event counted as a mass-layoff event.
7. Although the MLS program still keeps track of plant closings, it does not publish this data as part of its annual MLS report.
8. Like other BLS programs, aggregate data on particular industries cannot be divulged to the public if the industry is represented by fewer than three employers, or if one employer accounts for 80 percent or more of the separations.
9. For example, *Mass Layoffs in 1990*, Bulletin 2395, U.S. Department of Labor, Bureau of Labor Statistics, February 1992.
10. "Employer Layoff and Recall Practices," prepared for U.S. Department of Labor's Employment and Training Administration by U.S. Department of Labor's Bureau of Labor Statistics, January 1992, Executive Summary and Preface, pp. iii-vi.
11. The Standard Industrial Classification (SIC) system is the statistical classification standard underlying all establishment-based federal economic data. The structure of the SIC systems makes it possible to tabulate, analyze, and publish employment data on four levels, according to the amount of industry detail considered most appropriate. The four levels are: division (one digit), major group (two digit), industry group (three digit), and industry code (four digit).

RA Newsletter Changes Name, Upgrades Look

(continued from front page)

tables in the monthly "Arizona's Workforce" section to give a better understanding of where changes in the labor force are occurring. Those with a keen eye will also notice the publication is now being produced at a higher resolution (more dots per inch). This will aid readability — particularly with graphs — and can be done at essentially no extra cost, thanks to desktop publishing's increasing technology.

Among other minor changes include the redesign of the back page to allow for more editorial content, and a special page of graphs and tables featuring Arizona and national economic indicators, which will appear most months (but not in this issue). And finally, for those keeping score (such as libraries), the volume and issue numbers of this publication will follow along as if there were no changes.

Research Administration (RA) would like your comments on our changes, as well as ideas for improving the publication. Our address and telephone number are in the editorial box on the back page. In addition, RA would like to update our mailing list at this time, and if you want to make a change in your subscription (e.g., new address, ending subscription), please indicate so in the editorial box.

Jobless Rate Fell to 8.3% in February

(continued from page 7)

February 1991 (3,100 in metro Phoenix). Arizona aircraft and missile factory employment peaked at 28,000 in July 1990. Special federal funding of $1.5 million, however, was recently announced to retrain job losers at Hughes Aircraft Co. in Tucson. Hopefully, retraining funds will also be available for Phoenix-area aircraft plant employ-ees who are losing their jobs

In summary, Arizona's unemployment rate in February fell five-tenths of a percentage point from January's revised level of 8.8 percent. But the rate's drop was due to declines in the labor force and unemployment — not a rise in employment — as major industry groups experienced either weaker-than-normal employment gains or job losses, as was the case with manufacturing, construction, and retail trade. The outlook for construction and retail trade portends improvement soon, but manufacturing will probably continue to slide until defense-contracting manufacturers adjust to post-Cold War defense budgets.

—Ron Simon
RA Economic Analysis Manager

ARIZONA ECONOMIC TRENDS

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The purpose of *Arizona Economic Trends* is to provide an update and analysis of state and county employment and economic data, as well as information on state and national programs and policies that affect the nation's and Arizona's labor markets. Included in this publication twice yearly are Research Administration's two-year projections of employment, unemployment, and labor force for Arizona and its major sub-state regions.

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WARN Set Up to Give Early Notice of Layoffs

Note: In light of the number of major layoffs that have occurred nationally and in Arizona in the past few years, articles in the April, May, and June issues of Arizona Economic Trends are looking at several pieces of federal legislation designed to soften the blow — for laid-off workers, as well as local communities — when massive displacement of workers occurs. The articles will look at the functions of the laws, plus their results and effectiveness on a national and statewide basis.

In the April issue, two stories focused on the Mass Layoff Statistics (MLS) program, an eight-year-old, data-collection program that tracks layoffs of 50 or more workers — through unemployment insurance records — in nearly all states and Washington D.C. This month's issue will focus on the Worker Adjustment and Retraining Notification Act (WARN), which took effect in early 1989 and, with some exceptions, requires medium-size and large companies to give early notification to workers and communities when they plan major layoffs or are closing. Then in the June issue, several articles will look at the Economic Dislocation and Worker Adjustment Assistance Act (EDWAA), which also took affect in 1989 and provides job-search skills and retraining for displaced workers as a way to speed their reentry into the workforce.

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MASS
LAYOFFS

Second in a series

It's 2 p.m. on a Friday afternoon and XYZ Company has just notified employees that it plans to go out of business as of 5 p.m. today. Rumors had been flying for weeks that XYZ was planning to lay off workers or cease operations, but no official word has come down from management. Most of the company's 500 employees, many with 20 or more years of service, had not prepared — job-search wise or emotionally — for the possibility of losing their jobs, primarily because they always had felt their employment was secure. XYZ, meanwhile, had known for several months that it would be shutting its doors due to declining sales, but did not want to end its operations before it had lined up a buyer for its buildings. Also, the company had feared that by giving advance notice of a plant shutdown, disgruntled employees may not work as hard and that it would cause stressful conditions between workers and management during the final months of operation.

Prior to Feb. 4, 1989, the above scenario — or something close to it — would not have been unusual at many medium-sized and large U.S. companies. Except in two states and where labor and management had prearranged agreements, U.S. businesses had the right to let go workers with no advance warning,[1] although company policies varied across the board; some employers offering generous severance packages, while others gave little or no leave benefits.

But with passage of the Worker Adjustment and Retraining Notification Act (WARN) in August 1988, more commonly known by its acronym, the playing field between medium- and large-sized businesses and their workers — as it related to layoffs — became a little more level. With several exceptions, companies with

100 or more full-time workers were now required to give advance written notice at least 60 days prior to a permanent plant closure or major layoff. In general, WARN defines a "plant closing" as an employment loss of 50 or more workers at one or more distinct units within a single site within a 30-day period; a "mass layoff" is defined as an employment loss at a single site of 500 workers, or 33 percent of the employees if it involves at least 50 workers, within a 30-day period (see "DOL Brochure Gives Details ... ," p. 3)

"Workers, their families and their communities will now have a better chance to plan for the future," said AFL-CIO President Lane Kirkland after WARN was passed.[2] The director of legislative affairs and human resources at the National Association of Manufacturers, however, warned that the new legislation would hurt medium-sized businesses, who he said often cannot predict what they plan to do two months in advance.[3]

Industry Changes Led to WARN

What provoked Congress to pass an early notification law — which was already required in most European countries and parts of Canada — was primarily due to two reasons: rapid structural changes in the nation's industrial base that occurred in the late 1970s and early '80s, which caused widespread layoffs and plant closings; and a large percentage of U.S. workers affected by those changes who were receiving little or no advance warning before losing their jobs.

Although an early notification law had been introduced in Congress as early as 1973, the idea didn't gain momentum until the mid-'80s when, despite better economic times, a large displacement of workers was still occurring. According to a General Accounting Office (GAO) report, even in the strong economic years of 1983 and 1984 — when U.S. employment growth increased about 5 percent — more than 1 million workers lost their jobs due to business closure or permanent mass layoffs in establishments with more than 100 workers, with another million jobs likely lost in smaller establishments.[4]

> ***What provoked Congress to pass an early notification law ... was primarily due to two reasons: rapid structural changes in the nation's industrial base that occurred in the late 1970s and early '80s, ... and a large percentage of U.S. workers affected by those changes who were receiving little or no advance warning before losing their jobs.***

Making matters worse, between January 1979 and January 1984 one-fourth of all displaced workers were without a job for a year or more. And of those returning to work, the majority took a cut in earnings, either through lower wages or acceptance of part-time employment in place of a full-time job.[5]

Concerning advance notification, two major surveys were conducted by federal agencies in the mid-'80s showing a lack of warning time for a good percentage of laid-off workers, although one study painted a much worse picture.

A 1985 survey by the Labor Department's Bureau of Labor Statistics (BLS) showed that in layoffs involving 50 or more workers in seven states it studied, in more than one-half of the events — affecting two-thirds of the workers — no advance notice was given.[6] Meanwhile, a GAO study of companies with 100 or more employees, showed that 24 percent gave no advanced notice to workers involved in layoffs of 100 or workers during 1983 and '84.[7] The large differences in the two studies' findings could have been due to the fact that the GAO specifically surveyed larger companies, who do tend to give more advanced notice of plant closings and layoffs.

The two surveys' findings, nevertheless, gave support to a variety of interest groups (e.g., organized labor, mayors of affected cities) who were lobbying Congress to enact legislation that would give workers and local communities some lead time to find new work or attract new business. And in 1985 and '87, Congress introduced legislation that attempted to not only offer advance notification of plant closings and layoffs, but also force companies to use procedures for avoiding job losses.

Those bills, however, failed to gain enough support to pass both houses, let alone an expected veto from then President Reagan, who opposed laws he believed overregulated business. Some of the provisions found objectionable in the '85 and '87 legislation were: advance-warning periods ranging from 90 to 180 days, considered too long because it would limit business flexibility; bureaucratic oversight and enforcement — with its attending costs — of advanced-warning provisions; and consultation and sharing of information between employer and employee to identify ways to avoid a layoff or closing, considered too intrusive by business.[8]

In 1988, however, a showdown emerged between Congress and Reagan. Early in the year, the President successfully vetoed trade legislation passed by Congress that contained early-notification provisions, even though the advanced-warning provisions were far-less stringent than those considered in '85 and '87. But Congress fought back by uncoupling the early notification section from the trade law, and with growing public support for an advanced-warning law, was able to pass WARN in August with enough votes to override a potential veto.

Because of possible repercussions in a presidential election year, Reagan allowed the bill to become law without his signature, but still voiced his opposition in a presidential statement. "Workers should be given as much notice as possible when a business is forced to resort to layoffs, or to close altogether. ... But the Federal government's mandating that businesses under virtually all conditions must give 60-day's notice — even if doing so eliminates any chance to save the company — is not a proper course."[9]

Although Reagan was unhappy with WARN's passage, he and those opposing advance notification may not have lost as much as his statement indicated. Major concessions along the way limited WARN's power and possibly its effectiveness (see below, "Effectiveness of WARN"). "The plant-closing legislation was weakened considerably during the process and the measure in its present form allows exemptions that could reduce its impact on ... businesses," said a *Washington Post* article at the time of its passage.[10]

In addition, almost immediately after WARN passed, legislation was approved to help workers affected by major layoffs — the Employment Dislocation Worker Assistance Act (EDWAA) (see next month's issue) — which likely made early notification more palatable to those opposing WARN. Because by helping workers to re-enter the workforce more quickly, employers' unemployment insurance costs would likely be reduced.

Reasons For, Against Early Notice

When advanced-notification laws were being debated, those for and against it agreed that advanced notification of major layoffs and plant closings was the "ideal situation," but the sides parted when it came to

DOL Brochure Gives Details of WARN Law

The following material on the Worker Adjustment and Retraining Notification Act (WARN) is reprinted in part from a brochure titled, "A Guide to Advance Notice of Closings and Layoffs," produced by the U.S. Department of Labor's Employment and Training Administration. At the end is an address and phone number to contact that department for additional information.

General Provisions

The Worker Adjustment and Retraining Notification Act, Public Law 100-379 (29 U.S.C. 2101, et seq.) offers protections to workers, their families, and communities by requiring employers to provide notice 60 days in advance of covered plant closings and covered mass layoffs.

Employer Coverage

In general, employers are covered by WARN if they have 100 or more employees, not counting employees who have worked less than six months in the last 12 months and not counting employees who work an average of less than 20 hours a week. Private, for-profit employers and private, nonprofit employers are covered, as are public and quasi-public entities which operate in a commercial context and are separately organized from the regular government. Regular federal, state, and local government entities which provide public services are not covered.

Employee Coverage

Employees entitled to notice under WARN include hourly and salaried workers, as well as managerial and supervisory employees. Business partners are not entitled to notice.

What Triggers Notice

Plant Closing: A covered employer must give notice if an employment site (or one or more facilities or operating units within an employment site) will be shut down, and the shutdown will result in an employment loss (as defined later) for 50 or more employees during any 30-day period. This does not count employees who have worked less than six months in the last 12 months or employees who work an average of less than 20 hours a week for that employer. These latter groups, however, are entitled to notice (discussed later).

Mass Layoff: A covered employer must give notice if there is to be a mass layoff which does not result from a plant closing, but which will result in an employment loss at the employment site during any 30-day period for 500 or more employees, or for 50-499 employees if they make up at least 33 percent of the employer's active workforce. Again, this does not count employees who have worked less than six months in the last 12 months or employees who work an average of less than 20 hours a week for that employer. These latter groups, however, are entitled to notice

Exemptions

An employer does not need to give notice if a plant closing is the closing of a temporary facility, or if the closing or mass layoff is the result of the completion of a particular project or undertaking. This exemption applies only if the workers were hired with the understanding that their employment was limited to the duration of the facility, project or undertaking. An employer cannot label an ongoing project "temporary" in order to evade its obligations under WARN.

An employer does not need to provide notice to strikers or to workers who are part of the bargaining unit(s) which are involved in the labor negotiations that led to a lockout when the strike or lockout is equivalent to a plant closing or mass

(continued on page 6)

making advance notification mandatory.

Those pro and con put forth a number of reasons for their views, and many of those reasons are provided in this section. But overall, the justification for an advance-notice law came down to an issue of fairness (e.g., time to find another job), while for those opposed to WARN, economic costs — from administering WARN to penalties — were the major themes.

Some of the reasons given for advance notification were:

- that it gives companies, labor, and government agencies time to plan and develop adjustment-assistance programs.
- **when it's used in conjunction with programs such as EDWAA, it can reduce employers' costs by getting laid-off workers into the workforce more quickly and reducing employers' unemployment insurance costs.**
- **related to the just-mentioned reason, displaced workers are more likely to participate in job-assistance projects that begin before a job loss. " ... it is difficult even to let workers know that help is available after they are out of work and out of touch," said a GAO report.**[11]
- whether or not they take advantage of adjustment services, it helps benefit people, by giving workers a chance to develop their own job-hunting or training options, or to adjust financial or other family plans.
- it helps maintain the morale and loyalty of remaining workers and reputation of a company, by showing the company treats its employees fairly. " ... workers are less likely to respond in a punitive manner whey they perceive that their employer recognizes that the layoff and job transition process is a difficult one and the employer is therefore attempting to buffer the impact," said Ruth Fedrau,[12] an expert in job displacement.

> *"Both elements of the compliance mechanism — court enforcement and legal sanctions — pose implementation problems. ... By the time a court acts, it is likely that the closing or layoff has already happened ... ."*
>
> *—John Portz*
> *Assistant Professor,*
> *Northeastern University*

On the other hand, arguments against mandating advance notification included::

- it inhibits companies' flexibility in a more competitive, worldwide operating market, by committing employers to make a long-term prediction of business conditions
- it is too costly, particularly to medium-sized businesses. Costs incurred by employers include the administrative costs of developing and executing an apparatus to monitor and forecast market conditions, as well as the administrative costs to provide notice, and costs of penalties. In a 1988 report by Robert R. Nathan Associates, it was estimated that if the WARN law had been in effect in 1983 and '84, it would have cost businesses $1.8 billion each year.[13]
- advance notice "could worsen the conditions that led to the notice and make a firm's decline inevitable. ... notice that a firm intends to layoff workers or close gives signals to customers and creditors that the firm is in trouble."[14]
- productivity will decline because of a drain of top talent needed for an orderly closure or layoff, which will reduce profits and worsen conditions that led to the announcement. To keep top talent, companies may need to pay bonuses, adding costs. "The difference between employees' current and expected compensation and alternatives available in the market will be narrowed, causing some workers to leave the firm before expiration of the notification period," said the Nathan Associates study.[15]

GAO Studying WARN Law

Because WARN has only been in effect a little more than three years, little data has been compiled on the effectiveness of the law (e.g., are companies complying with its provisions?) as well as if it has produced any adverse effects on business. However, results from one study and comments by several state and federal officials appear to suggest that WARN is providing only limited protection for workers and has caused a large amount of confusion in several areas for all parties involved — business, workers, and government agencies. Another study of WARN by the GAO, due out this summer, should give more insight into the overall affects of WARN.

In a recent report by a Northeastern University political scientist, state officials said "loopholes" in WARN, inadequate enforcement provisions, and its overall vagueness have made it easy for employers to avoid compliance with the law or unsure or unaware they need to comply, thus limiting WARN's effectiveness. The results of the report, "WARN and the States: Implementation of the Federal Plant Closing Law," are based on comments and data received from 35 state agencies that handle WARN notices.

Of particular concern to state-agency officials were the number and vagueness of "exceptions" allowed under WARN. "'loopholes in the law provides avenues of escape for many employer anticipating layoffs/closures,'"

Table 1

Reasons For, Against Early Notification Legislation

Reasons For:

- ✓ gives companies, labor, and government agencies time to plan and develop adjustment-assistance programs
- ✓ can reduce employers' costs by getting laid-off workers into the workforce more quickly, thus reducing employers' unemployment insurance costs
- ✓ helps maintain morale and loyalty of remaining workers and reputation of a company by showing the company treats its employees fairly

Reasons Against:

- ✓ inhibits companies' flexibility in a more competitive, worldwide operating market
- ✓ too costly, particularly to medium-sized businesses; costs include administrative costs of developing and executing apparatus to monitor and forecast market conditions, and costs of penalties
- ✓ productivity will decline because of a drain of top talent needed for an orderly closure or layoff

Source: U.S. Office of Technology Assessment, September 1986

one official was quoted in the report.[16] The net effect of creating broad exemptions, said the study's author, John Portz, has been to make compliance with WARN more difficult to monitor.

One "exception" considered particularly troublesome by state officials — allows employers to give less than 60-days notice for a layoff or plant closing when there are "unforseeable business circumstances," which could cover a broad range of reasons and be subject to broad interpretation. Another exception considered too vague, which has caused some confusion in Arizona, exempts companies from providing notice "if the plant closing involves a temporary facility, or if the closing or mass layoff is the result of the completion of a particular project or undertaking."

The secretary/treasurer of the state's AFL-CIO, Chuck Huggins, believes that one employer in the state was able to avoid issuing WARN notices for the latter exception because the word "temporary" is subject to several interpretations. Huggins believes that projects that technically may be "temporary" are in fact "permanent" as long as funding for the project continues for an indefinite period of time.

Portz says that exceptions, however, are only one problem — and a smaller one at that — with the compliance provisions of WARN. The other is enforcement, which is covered by the courts, not by the government.

In order to determine if a company needs to file a notice, court action must be taken by either a company's union, its workers, or units of local government where the company is located. But the problem with this type of enforcement, Portz says, is the "vacuum" that occurs while the court makes its decision.

"The compliance mechanism is seen by the states as one of the weakest links in the implementation process," Portz says.[17] "Both elements of the compliance mechanism — court enforcement and legal sanctions — pose implementation problems. ... By the time a court acts, it is likely that the closing or layoff has already happened ... ."[18]

Through February 1992, 47 court cases (none in Arizona) had been filed on WARN in federal courts, with less than half resulting in a court decision, the study says. About a half-dozen each have gone in favor of the plaintiffs (e.g., workers) and defendants (e.g., businesses) with several others out on appeal.

The head of the federal office responsible for answering questions about WARN agrees there has been a lot of confusion over WARN's provisions. "It's a very complicated law. Our office has received 20,000 calls about WARN (since the program began)," says Robert Columbo, director of the Labor Department's Office of Worker Readjustment and Retraining Programs. However, Columbo and a brochure put out by his office (see "DOL Brochure Gives Details ... ," p. 3) emphasize that the DOL does not oversee WARN and is limited to giving out only general information on the law.

Possibly because of confusion over WARN, many workers in state agencies that receive WARN notices, believe — correctly or incorrectly — that employers are not filing WARN notices when they are required to, says Lou Ockunzzi, a senior evaluator with the GAO, which recently concluded a study of WARN. Ockunzzi, who would not release any specifics about the report's findings, says the GAO study looked at several aspects of WARN, including the number of WARN notices issued, whether employers were providing notice and in a timely fashion, problems with implementing WARN (e.g., confusing provisions), and court cases.

Pertaining to the WARN notices, the GAO study attempted to measure whether there has been compliance with WARN by comparing the number of WARN notices issued in 1991 with the number of "mass-layoff events" tabulated by BLS' Mass Layoff Statistics (MLS) program (see April 1992

(continued on page 15)

Brochure Gives Details of WARN Law

(continued from page 3)

layoff. Non-striking employees who experience an employment loss as a direct or indirect result of a strike and workers who are not part of the bargaining unit(s) which are involved in the labor negotiations that led to lockout are still entitled to notice.

Who Must Receive Notice

The employer must give written notice to the chief elected office of the exclusive representative(s) or bargaining agent(s) of affected employees and to unrepresented individual workers who may reasonably be expected to experience an employment loss. Employees who have worked less than six months in the last 12 months and employees who work an average of less than 20 hours a week are due notice, even though they are not counted when determining the trigger levels.

The employer must also provide notice to the State dislocated worker unit and to the chief elected official of the unit of local government in which the employment site is located.

Notification Period

With three exceptions, notice must timed to reach the required parties at least 60 days before a closing or layoff. The exceptions to 60-day notice are:

(1) Faltering company. This exception, to be narrowly construed, covers situations where a company has sought new capital or business in order to stay open and where giving notice would ruin the opportunity to get the new capital or business, and applies only to plant closings: (2) Unforeseeable business circumstances. This exception applies to closings and layoffs that are caused by business circumstances that were not reasonably foreseeable at the time notice would otherwise have been required; and (3) Natural disaster. This applies where a closing or layoff is the direct result of a natural disaster, such as a flood, earthquake, drought or storm.

Form and Contact of Notice

No particular form of notice is required. However, all notices must be in writing. Any reasonable method of delivery designed to ensure receipt 60 days before a closing or layoff is acceptable.

Penalties

An employer who violates the WARN provision by ordering a plant closing or mass layoff without providing appropriate notice is liable to each aggrieved employee for an amount including back pay and benefits for the period of violation, up to 60 days. The employer's liability may be reduced by such items as wages paid by the employer to the employee during the period of the violation and voluntary and unconditional payments made by the employer to the employee.

An employer who fails to provide notice as required to a unit of local government is subject to a civil penalty not to exceed $500 for each day of violation. This penalty may be avoided if the employer satisfies the liability to each aggrieved employee within three weeks after the closing or layoff is ordered by the employer.

Enforcement of WARN requirements is through the United States district courts. Workers, representatives of employees, and units of local government may bring individual or class-action suits. In any suit, the court, in its discretion, may allow the prevailing party a reasonable attorney's fee as part of the costs.

General questions on the regulations may be addressed to: U.S. Department of Labor, Employment and Training Programs, Office of Job Training Programs, Room N-4703, 200 Constitution Ave., N.W., Washington, D.C. 20210; or call (202) 535-0577

OES Survey Targets Manufacturing, Hospital Sectors

Establishments in the manufacturing, hospital, and agricultural-services industries are the target of the 1992 Occupational Employment Statistics (OES) survey. The OES program is a federal-state cooperative effort that determines current and future demand for occupational employment.

For 16 years, Arizona's OES Unit, which is part of DES, Research Administration, has been collecting data with the support of the Arizona business community. Information from the OES program has become an integral part of Arizona's occupational planning efforts.

Employers, planners, and other users have access to OES data through Arizona's *Occuupational Employment Forecasts,* which are annual publications that present current and future occupational demand data for each county and the state as a whole.

Career guidance counselors, students, and other users also have access to OES data through the MICRO OIS, a statewide microcomputer data base developed by the Arizona State Occupational Information Coordinating Committee (ASOICC). The MICRO OIS is available at more than 200 locations (principally schools) in the state.

Arizona employers selected for this year's survey are asked to help with the success of the program by filling out completely an OES survey form; or if they need help in filling out the form, by calling the OES Unit at (602) 542-3871 (in metro Phoenix); or toll free outside the Phoenix area at (800) 321-0381.

—Jim Heigle,
Arizona OES Supervisor

ARIZONA'S WORKFORCE

Unemployment Rate Edged Up Slightly to 8.4% in March

Arizona's seasonally adjusted unemployment rate in March edged up one-tenth of a percentage point to 8.4 percent from February's rate of 8.3 percent. This makes the fifth-consecutive month Arizona's unemployment rate had been above the corresponding national figure, which remained unchanged in March at 7.3 percent.

At the substate level, Maricopa County's unemployment rate declined three-tenths of a percentage point in March to a seasonally adjusted rate of 7.4 percent. Pima County's rate, on the other hand, held steady in March at 5.9 percent.

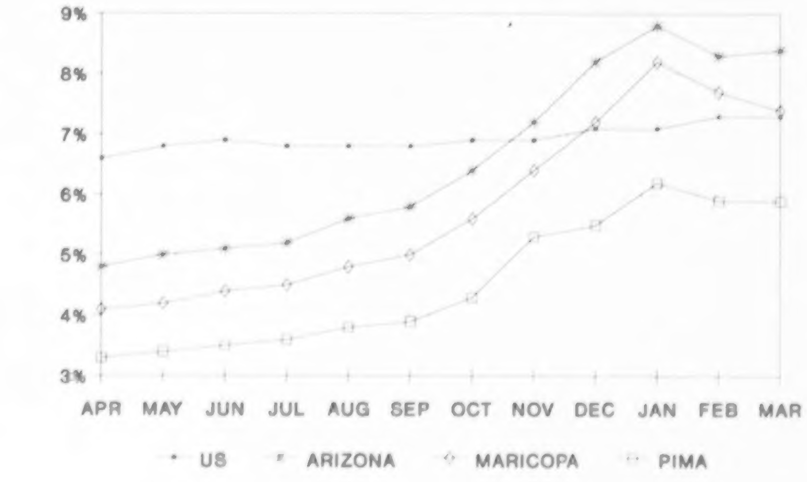
The number of people unemployed increased statewide by about 3,800 in March, which follows a decrease of 8,300 in February. Both Maricopa and Pima counties experienced slight over-the-month increases in the number of unemployed. But Yuma County, where various seasonal harvesting operations were winding down, had the bulk of the unemployment increase, up nearly 3,000.

Arizona non-farm wage and salary employment in March showed an increase of 5,400, its second-consecutive monthly increase. But despite the positive news, the job gain was the smallest February-to-March increase since the recession year of 1982. As for the state's two largest metropolitan areas, Maricopa County added 3,100 non-farm payroll positions in March and Pima County added 1,000 jobs.

Arizona construction employment showed signs of improvement in March with a gain of 1,500 jobs. Most of the increase came in special trades (e.g., masonry work, electrical work), up nearly 1,200 jobs and accounting for more than 80 percent of total construction gains.

Figure 1

U.S., Arizona, Maricopa County, and Pima County Unemployment Rates (Seasonally Adjusted), April 1991-March 1992



Source: Arizona Dept. of Economic Security, Research Administration, April 1992

The over-the-month construction employment increase of about 2 percent may well signal an important turnaround in Arizona's construction industry. Supporting this conclusion is the fact that for the first time since August 1986, Arizona had an over-the-year increase in construction employment; if only a meager eight-tenths of one percent.

The state's two major metropolitan areas both experienced gains in construction employment, particularly in areas related to an improving housing market. Maricopa County added 1,100 positions, most of which were in special trades

Manufacturing Still Sluggish

Manufacturing employment in Arizona, however, continued its downward trend in March (-700) as over-the-year manufacturing employment losses have occurred each month since January 1990. And last month every category within durable and non-durable goods had over-the-year losses, except for lumber and wood products.

The finance, insurance, and real estate (FIRE) group showed a modest employment increase in March, but this followed losses in the prior two months. Here, the gains were in the combined real estate and insurance sector, while declines continued in the finance industry. Not surprisingly, the real estate sector is showing enhanced market activity as consumers begin to take advantage of lower interest rates and higher home affordability.

Arizona's services industry increased employment for the second month in a row, adding 2,800 workers in March. Business services contributed the largest share of the employment gains. In both Maricopa and Pima counties, employment in business services showed fairly strong monthly and over-the-year gains with over-the-month increases for March of 1,900 and 500, respectively.

Although showing an over-the-year increase, Arizona's trade employment declined in March by one-tenth of a percent. A small gain of 200 jobs in Pima County was offset by a loss of 600 jobs in Maricopa County. In Maricopa County, wholesale trade lost 100 jobs and retail trade, 500.

Government employment increased by 1,500 in March, primarily due to

(continued on back page)

Table 1

Arizona Labor Force, Employment, and Unemployment Data, March 1992[a]

(In Thousands)

	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991	Monthly/Yearly Change Feb. '92 - Mar. '92	Mar. '91 - Mar. '92
Total Civilian Labor Force[d]	**1726.0**	**1720.3**	**1696.3**	**5.7**	**29.7**
Total Unemployment	**145.8**	**142.0**	**80.4**	**3.8**	**65.4**
Unemployment Rate	**8.4%**	**8.3%**	**4.7%**	—	—
Unemployment Rate (Seasonally Adjusted)[e]	**8.4%**	**8.3%**	**4.8%**	—	—
Total Employment	**1580.2**	**1578.3**	**1615.9**	**1.9**	**-35.7**
Total Wage and Salary Employment[f, g]	**1510.0**	**1504.6**	**1507.4**	**5.4**	**2.6**
Private Sector	1224.1	1220.2	1227.5	3.9	-3.4
Government	285.9	284.4	279.9	1.5	6.0
Goods-Producing Industries	**259.3**	**258.4**	**268.0**	**0.9**	**-8.7**
Manufacturing	**168.8**	**169.5**	**179.1**	**-0.7**	**-10.3**
Total Durable Goods	125.0	125.9	135.4	-0.9	-10.4
Stone, Clay, and Glass	5.1	5.1	5.6	0.0	-0.5
Primary and Fabricated Metals	13.4	13.3	14.1	0.1	-0.7
Primary Metals	5.6	5.6	5.9	0.0	-0.3
Fabricated Metals	7.8	7.7	8.2	0.1	-0.4
Machinery	52.5	53.0	56.9	-0.5	-4.4
Aircraft and Missiles	23.6	24.0	27.7	-0.4	-4.1
Lumber and Wood Products (Excluding Furniture)	6.3	6.3	6.1	0.0	0.2
Total Nondurable Goods	43.8	43.6	43.7	0.2	0.1
Food and Kindred Products	10.1	10.0	9.6	0.1	0.5
Printing and Publishing	15.5	15.5	15.8	0.0	-0.3
Mining and Quarrying	**14.1**	**14.0**	**13.3**	**0.1**	**0.8**
Copper Mining	11.7	11.6	10.8	0.1	0.9
Construction	**76.4**	**74.9**	**75.6**	**1.5**	**0.8**
Service-Producing Industries	**1250.7**	**1246.2**	**1239.4**	**4.5**	**11.3**
Transportation, Communication, and Public Utilities	**80.0**	**79.7**	**81.8**	**0.3**	**-1.8**
Transportation	45.4	45.4	46.2	0.0	-0.8
Communications and Public Utilities	34.6	34.3	35.6	0.3	-1.0
Trade	**373.5**	**373.7**	**372.9**	**-0.2**	**0.6**
Total Wholesale Trade	75.0	75.0	74.3	0.0	0.7
Total Retail Trade	298.5	298.7	298.6	-0.2	-0.1
General Merchandise and Apparel	48.8	49.2	48.4	-0.4	0.4
Food Stores	51.1	51.5	50.3	-0.4	0.8
Automotive and Service Stations	34.5	34.3	33.6	0.2	0.9
Eating and Drinking Places	105.6	104.7	106.5	0.9	-0.9
Finance, Insurance, and Real Estate	**91.4**	**91.3**	**92.6**	**0.1**	**-1.2**
Services and Miscellaneous	**419.9**	**417.1**	**412.2**	**2.8**	**7.7**
Hotels and Lodging Places	40.5	40.3	41.2	0.2	-0.7
Business Services	87.0	85.4	82.1	1.6	4.9
Health Services	108.4	108.3	105.3	0.1	3.1
Government	**285.9**	**284.4**	**279.9**	**1.5**	**6.0**
Federal	44.6	44.8	44.1	-0.2	0.5

Notes and Source: See Table 3

Table 2

Maricopa County Labor Force, Employment, and Unemployment Data, March 1992(a)

(In Thousands)

				Monthly/Yearly Change	
	Mar. 1992(b)	Feb. 1992(c)	Mar. 1991	Feb. '92 - Mar. '92	Mar. '91 - Mar. '92
Total Civilian Labor Force(d)	1050.3	1048.6	1051.2	1.7	-0.9
Total Unemployment	78.4	77.4	43.4	1.0	35.0
Unemployment Rate	7.5%	7.4%	4.1%	—	—
Unemployment Rate (Seasonally Adjusted)(e)	7.4%	7.7%	4.1%	—	—
Total Employment	971.9	971.2	1007.8	0.7	-35.9
Total Wage and Salary Employment(f, g)	984.3	981.2	992.3	3.1	-8.0
Private Sector	762.6	763.0	775.6	-0.4	-13.0
Government	146.9	146.2	144.1	0.7	2.8
Goods-Producing Industries	405.3	406.0	419.2	-0.7	-13.9
Manufacturing	126.4	126.7	134.7	-0.3	-8.3
Total Durable Goods	95.1	95.6	103.5	-0.5	-8.4
Stone, Clay, and Glass	2.9	2.8	3.3	0.1	-0.4
Primary and Fabricated Metals	9.2	9.2	9.8	0.0	-0.6
Machinery	43.9	44.1	47.5	-0.2	-3.6
Total Nondurable Goods	31.3	31.1	31.2	0.2	0.1
Food and Kindred Products	7.2	7.2	7.0	0.0	0.2
Printing and Publishing	10.9	10.9	11.1	0.0	-0.2
Mining and Quarrying	0.7	0.7	0.7	0.0	0.0
Construction	50.6	49.5	49.5	1.1	1.1
Service-Producing Industries	806.6	804.3	807.4	2.3	-0.8
Transportation, Communication, and Public Utilities	55.5	55.3	58.8	0.2	-3.3
Transportation	33.2	33.0	35.4	0.2	-2.2
Communications and Public Utilities	22.3	22.3	23.4	0.0	-1.1
Trade	245.7	246.3	249.1	-0.6	-3.4
Total Wholesale Trade	56.6	56.7	57.6	-0.1	-1.0
Total Retail Trade	189.1	189.6	191.5	-0.5	-2.4
General Merchandise and Apparel	31.1	31.5	30.9	-0.4	0.2
Food Stores	32.5	32.8	32.5	-0.3	0.0
Automotive and Service Stations	21.3	21.2	20.8	0.1	0.5
Eating and Drinking Places	68.0	67.4	69.2	0.6	-1.2
Finance, Insurance, and Real Estate	73.0	72.9	74.1	0.1	-1.1
Services and Miscellaneous	285.5	283.6	281.3	1.9	4.2
Hotels and Lodging Places	24.9	24.9	25.5	0.0	-0.6
Business Services	70.4	69.1	66.5	1.3	3.9
Health Services	70.0	70.0	68.2	0.0	1.8
Government	146.9	146.2	144.1	0.7	2.8

Notes and Source: See Table 3

Table 3

Pima County Labor Force, Employment, and Unemployment Data, March 1992[a]

(In Thousands)

	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991	Monthly/Yearly Change Feb. '92 - Mar. '92	Monthly/Yearly Change Mar. '91 - Mar. '92
Total Civilian Labor Force[d]	321.0	320.6	308.0	0.4	13.0
Total Unemployment	18.8	18.7	10.5	0.1	8.3
Unemployment Rate	5.9%	5.8%	3.4%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	5.9%	5.9%	3.4%	—	—
Total Employment	302.2	301.9	297.5	0.3	4.7
Total Wage and Salary Employment[f, g]	**267.1**	**266.1**	**260.6**	**1.0**	**6.5**
Private Sector	203.0	202.3	199.0	0.7	4.0
Government	64.1	63.8	61.6	0.3	2.5
Goods-Producing Industries	**40.6**	**40.8**	**41.2**	**-0.2**	**-0.6**
Manufacturing	**23.8**	**24.2**	**25.2**	**-0.4**	**-1.4**
Total Durable Goods	18.6	19.0	19.9	-0.4	-1.3
Total Non-durable Goods	5.2	5.2	5.3	0.0	-0.1
Mining and Quarrying	**2.3**	**2.3**	**2.2**	**0.0**	**0.1**
Construction	**14.5**	**14.3**	**13.8**	**0.2**	**0.7**
Service-Producing Industries	**226.5**	**225.3**	**219.4**	**1.2**	**7.1**
Transportation, Communication, and Public Utilities	**10.7**	**10.6**	**9.3**	**0.1**	**1.4**
Transportation	6.1	6.1	4.9	0.0	1.2
Communications and Public Utilities	4.6	4.5	4.4	0.1	0.2
Trade	**62.7**	**62.5**	**60.9**	**0.2**	**1.8**
Total Wholesale Trade	9.0	9.1	8.8	-0.1	0.2
Total Retail Trade	53.7	53.4	52.1	0.3	1.6
General Merchandise and Apparel	7.9	7.9	7.7	0.0	0.2
Food Stores	8.3	8.2	8.2	0.1	0.1
Automotive and Service Stations	5.6	5.6	5.4	0.0	0.2
Eating and Drinking Places	19.2	19.1	19.1	0.1	0.1
Finance, Insurance, and Real Estate	**11.7**	**11.6**	**11.6**	**0.1**	**0.1**
Services and Miscellaneous	**77.3**	**76.8**	**76.0**	**0.5**	**1.3**
Hotels and Lodging Places	7.0	7.0	7.2	0.0	-0.2
Business Services	12.3	12.0	11.3	0.3	1.0
Health Services	23.2	23.1	22.6	0.1	0.6
Government	**64.1**	**63.8**	**61.6**	**0.3**	**2.5**

Notes:

a) Data on labor force, total unemployment, total employment, and seasonally adjusted unemployment rate should not be used for economic-assistance programs. Data for conomic-assistance programs are available by contacting DES, Research Administration

b) Preliminary and subject to revision following month

c) Revised

d) Adjusted to Current Population Survey (CPS) to reflect place of residence

e) Normal seasonal variations have been eliminated to reflect underlying trends

f) By place of work; does not include agricultural workers, self-employed, unpaid family members, and domestic workers

g) Detail may not add up correctly due to rounding

h) Rounded to the nearest one-quarter

Source: Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, April 1992

Table 4

Non-metropolitan Counties' Labor Force, Employment, and Unemployment Data, March 1992(a,b)

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz
Total Civilian Labor Force(d)	15,900	36,125	44,650	13,875	8,125	3,375	6,475
Total Unemployment	2,950	3,825	4,875	1,975	875	350	875
Unemployment Rate	18.5%	10.6%	10.9%	14.3%	10.7%	10.3%	13.5%
Unemployment Rate (Seasonally Adjusted)(e)	18.2%	9.9%	10.7%	13.0%	10.6%	10.3%	12.9%
Total Employment	12,950	32,300	39,775	11,900	7,250	3,025	5,600
Total Wage and Salary Employment(f,h)	15,450	26,625	41,550	12,000	5,300	3,400	3,550
Private Sector	9,650	15,050	28,325	8,875	3,050	2,825	2,525
Government	5,800	11,575	13,225	3,125	2,250	575	1,025
Goods-Producing Industries	825	2,200	4,350	3,275	400	2,250	500
Manufacturing	475	1,150	2,975	1,375	200	25	200
Mining and Quarrying	25	75	150	1,150	0	2,000	50
Construction	325	975	1,225	750	200	225	250
Service-Producing Industries	14,625	24,425	37,200	8,725	4,900	1,150	3,050
Transportation, Communications, and Public Utilities	1,675	1,475	3,025	450	150	50	175
Trade	1,675	5,550	10,200	2,600	1,475	325	1,175
Finance, Insurance, and Real Estate	375	625	675	250	125	25	100
Services and Miscellaneous	5,100	5,200	10,075	2,300	900	175	575
Government	5,800	11,575	13,225	3,125	2,250	575	1,025

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
Total Civilian Labor Force(d)	38,975	27,725	39,225	12,275	40,225	67,725
Total Unemployment	4,950	4,675	4,700	1,825	4,250	12,450
Unemployment Rate	12.7%	16.9%	12.0%	14.8%	10.6%	18.4%
Unemployment Rate (Seasonally Adjusted)(e)	12.1%	16.0%	11.7%	21.2%	9.6%	25.2%
Total Employment	34,025	23,050	34,525	10,450	35,975	55,275
Total Wage and Salary Employment(f,h)	27,225	20,725	32,025	11,525	27,500	31,925
Private Sector	22,375	14,250	21,625	9,625	22,475	23,250
Government	4,850	6,475	10,400	1,900	5,025	8,675
Goods-Producing Industries	5,125	3,200	9,025	1,275	5,300	3,200
Manufacturing	2,600	1,525	2,900	950	2,375	1,850
Mining and Quarrying	50	1,025	5,400	0	1,050	25
Construction	2,475	650	725	325	1,875	1,325
Service-Producing Industries	22,100	17,525	23,000	10,250	22,200	28,725
Transportation, Communications, and Public Utilities	1,375	1,475	975	775	1,000	1,375
Trade	8,450	4,275	5,750	5,450	7,875	10,300
Finance, Insurance, and Real Estate	1,200	525	575	275	950	1,050
Services and Miscellaneous	6,225	4,775	5,300	1,850	7,350	7,325
Government	4,850	6,475	10,400	1,900	5,025	8,675

Notes and Source: See Table 3

Table 5

Estimated Hours and Earnings of Production Workers, by Selected Industry Groups, March 1992[a]

Arizona

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991
Manufacturing	$443.50	$444.31	$426.30	40.8	40.8	40.6	$10.87	$10.89	$10.50
Aircraft and Missiles	666.58	662.63	655.27	45.1	45.2	45.6	14.78	14.66	14.37
Food and Kindred Products	361.28	353.51	367.06	39.1	38.3	39.3	9.24	9.23	9.34
Primary Metals	480.27	474.32	501.55	38.7	39.2	38.7	12.41	12.10	12.96
Machinery	449.63	454.57	399.80	41.1	41.1	40.1	10.94	11.06	9.97
Copper Mining	629.95	668.93	657.41	43.0	44.3	44.3	14.65	15.10	14.84
Construction	447.60	437.12	439.19	36.9	35.8	37.0	12.13	12.21	11.87
Public Utilities	786.94	755.04	745.20	42.4	41.9	43.2	18.56	18.02	17.25
Retail Trade[d]	276.58	279.26	257.43	32.5	32.7	31.9	8.51	8.54	8.07
Wholesale Trade	395.01	399.31	400.90	37.3	37.6	38.4	10.59	10.62	10.44

Maricopa County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991
Manufacturing	$468.65	$467.58	$449.36	41.4	41.6	41.0	$11.32	$11.24	$10.96
Construction	470.21	464.25	467.69	37.2	36.1	37.9	12.64	12.86	12.34
Retail Trade[d]	294.37	297.23	270.22	33.3	33.7	32.4	8.84	8.82	8.34
Wholesale Trade	401.13	407.43	434.70	37.7	37.9	38.3	10.64	10.75	11.35

Pima County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991	Mar. 1992[b]	Feb. 1992[c]	Mar. 1991
Manufacturing	$399.38	$413.90	$400.53	38.0	38.9	39.5	$10.51	$10.64	$10.14
Construction	392.41	386.28	386.24	36.2	35.8	35.5	10.84	10.79	10.88
Public Utilities	646.66	654.12	618.10	42.1	41.4	41.4	15.36	15.80	14.93

Notes:
a) Estimates are based on a sample of full- and part-time production and related workers whose payroll and hours are reported for the pay period that includes the 12th of the month
b) Preliminary and subject to revision following month
c) Revised
d) Excludes eating and drinking places

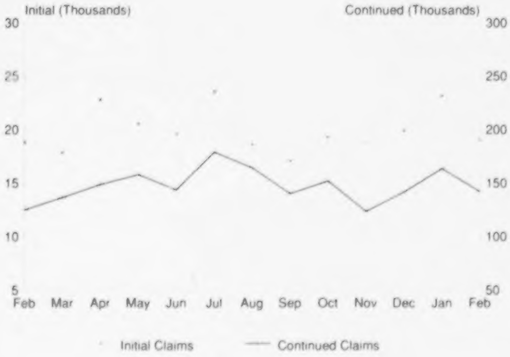
Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, April 1992*

ARIZONA LABOR MARKET INDICATORS

"Arizona Labor Market Indicators," a quick glimpse at data relevant to Arizona's job market, will appear most months in *Arizona Economic Trends*. Some of the data that had appeared each month in the *Arizona Labor Market Information Newsletter*, such as the U.S. and Phoenix-area consumer price indices, will appear at least once a quarter in *Arizona Economic Trends*. If you need this information more frequently, contact Research Administration at 542-3871.

Figure 1

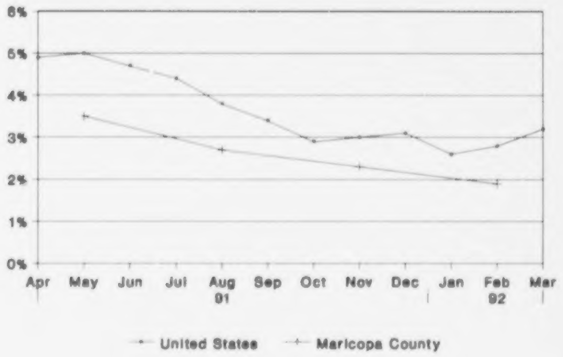
Arizona Continued and New Unemployment Insurance Claims, February 1992



Source: Arizona Dept. of Economic Security, Research Administration, February 1992

Figure 2

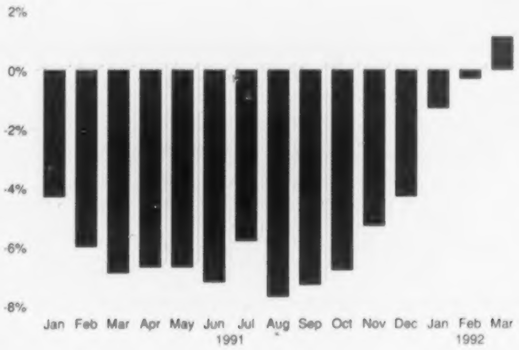
Percentage Change in U.S. (Monthly) and Maricopa County (Quarterly) Consumer Price Indecies, April 1991-March 1992



Sources: U.S. Dept. of Labor, Bureau of Labor Statistics, February 1992; and Arizona State University, Economic Outlook Center

Table 3

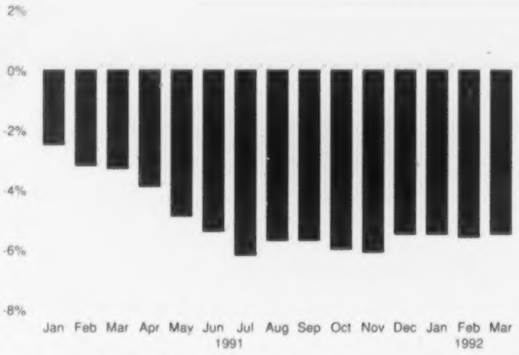
Monthly Over-the-Year Percentage Change in Arizona Construction Employment, January 1991-March 1992



Source:, U.S. Dept. of Labor, Bureau of Labor Statistics, February 1992

Table 4

Monthly Over-the-Year Percentage Change in Arizona Manufacturing Employment, January 1991-March 1992



Source:, U.S. Dept. of Labor, Bureau of Labor Statistics, February 1992

Industry Update

"Industry Update" — featured each month as a service to our readers — is a compilation of public announcements and articles from newspapers and periodicals about business events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of industry news is not feasible. In addition, Arizona Economic Trends is not responsible for incorrect information reported by these sources.

Manufacturing

Fort Howard Co. is considering **the town of Parker and several other cities for a recycled paper plant** that when opened could eventually employ 1,000 full-time workers and have an annual payroll of about $50 million. The plant, which would be built on 250 acres in an area called Parker South, would also produce 2,500 to 3,000 construction jobs for three to four years while the facility is being built and possibly 7,000 service-related and subindustry jobs after the plant is opened. Initial employment would be about 250. A site announcement is expected in June or July.

The **MD Explorer helicopter**, a new rotorless model designed for commercial purposes, **has been OK'd production by McDonnell Douglas Helicopter Co.** Twenty countries have made down payments on 250 MD Explorers, one of two models designed by McDonnell Douglas to fill the gap for the Apache attack helicopter as defense-industry contracts dry up. The company's Mesa facility was expected to eliminate between 800 and 1,000 jobs in 1992, reducing its workforce below 4,000.

A leading maker of disk drives and memory modules for micro-computers plans to **open a manufacturing and sales operation in Phoenix** (3701 E. La Salle St.) by the end of the year. **Microtech International Inc.** of East Haven, Conn., expects to employ between 20 and 30 people.

Allied Color Industry Inc., which makes custom coloring for plastic products, is **moving its operations from Phoenix to Glendale** as part of an expansion plan. The Cleveland-based company expects to employment to double, from 15 to 30, when it moves into a 22,000-square-foot building at Glen Harbor Industrial Park.

Another Valley company stretching its arms is Phoenix-based **Microtest Inc.**, which makes devices that link micro-computer networks. Looking for larger facilities, Microtest **expects employment to increase from about 120 to 160** this year as its revenues are estimated to jump about 50 percent to $30 million in 1992.

In today's political climate, officials that bring "pork" to a community are generally frowned upon. But not in this case. **P.F.F.J. Inc.**, a subsidiary of Clougherty Packing Co. of Los Angeles, announced it will **build a pork-production plant in Snowflake** that is expected to employ 65 workers by 1994 and generate 75 to 100 construction jobs when work on the facility begins in June 1993. P.F.F.J. already runs a smaller sow facility north of Snowflake.

Construction

The **Perini Building Co., Western U.S. Division**, has been chosen **general contractor for a 2,500-room Las Vegas hotel** being developed by Circus Circus Enterprises Inc. The 30-story Luxor Hotel/Casino, which will be shaped like an Egyptian pyramid and cost about $300 million, will produce about 1,500 construction jobs, some of which will come from Perini's workforce in the Phoenix area. Perini, formerly Mardian Construction Co., recently completed the America West Arena in downtown Phoenix.

Pending zoning and City Council approval, a $12 million, **five-star resort, called Crown of Aldbourne, is in the planning stages for Prescott**. A former British citizen who ran a pub by the same name is proposing to build 120 thatched-roof cottages on 17 acres, along with a 9-hole executive golf course, swimming pool, and tennis courts.

Trade

Wal-Mart Stores Inc. will begin construction this year on a 1.5 million-square-foot **distribution center in Buckeye** to hold goods it imports from foreign countries until ready for shipment to Wal-Mart stores. The massive facility, expected to employ about 70 people, will be on 140 acres of farmland at Watson Road and Southern Avenue. The Arkansas-based retailer chose the Buckeye location because its in a foreign-trade zone, which allows businesses to hold off paying duty on goods until they are shipped out of the zone.

Broadway Southwest will **shut its doors at Chris-Town Mall in Phoenix** by August for a variety of reasons, among them poor sales. The store's nearly 170 employees, however, are expected to be offered jobs at other locations in the Valley. Carter Hawley Hale Stores Inc. of Los Angeles, parent company of Broadway Southwest, has been under bankruptcy protection and cutting back its operations.

Kmart Corp. is **building a 107,000-square-foot store in Prescott Valley** on Highway 69 at Lake Valley Road. The new location, part of nationwide expansion plan, is expected to open in July.

Sears, Roebuck and Co. plans to eliminate 100 jobs from its regional accounting center at The Colonnade Mall in Phoenix sometime in 1993. The move is part of national reorganization plan that will cut more than 40,000 jobs.

Services

Harkins Theaters plans to **build a multi-cinema complex at Third and Fillmore streets**, near the Arizona Center shopping complex. Scottsdale-based Harkins will have either 10 to 12 screens in the $4.5 million complex with one theater featuring 800 seats, the same size its Cine Capri Theater, the Valley's largest.

WARN Set Up to Give Advance Notice of Layoffs

(continued from page 5)

issue of *Arizona Economic Trends*). Although WARN and the MLS program have different triggering mechanisms and thresholds for defining a mass layoff, the GAO and BLS worked out a system to filter out the programs' differences and come up with comparable data, Ockunzzi says.[19]

In a less scientific way, Portz' study compiled data on WARN notices for the first two years of the program and compared it to MLS data in an attempt to gain a general sense of whether companies were providing advance warning. The study's results tended to support views from state officials that the number of WARN notices being filed were not corresponding to what was occurring in the economy, Portz says, showing that in only about three-fifths of cases where the MLS program showed there were mass layoffs, did states receive WARN notices.

Using Portz' system of analysis for Arizona alone, the state's ratio of WARN notices to MLS events for the two-year period analyzed shows much lower ratios than the national average. For both the 1989-90 program year (7/1-89-6/30/90) and 1990-91 program year (7/1/90-6/30/91), Arizona had 22 WARN notices filed with the state Dislocated Worker Unit. During those same periods, there were 73 and 93 MLS events recorded, giving the state ratios of .30 and .24 for those two-year periods, respectively.

However, those low ratios are quite misleading and should not be interpreted to mean there has been lack of compliance in Arizona. Because, as pointed out in the May issue of *Arizona Economic Trends*, about 50 percent of the state's MLS events in the calendar years of 1990 and 1991 were due to seasonal factors, a much higher percentage than nationally. And seasonal businesses, by their temporary nature of work, would not likely require the filing of WARN notices.

Finally, in regards to the speculated economic costs or other potential problems brought out before WARN was passed, officials from the U.S. and Arizona chambers of commerce say they have heard little or no complaints about WARN regarding those issues. However, the manager of Human Resources, Policy, and Law for the U.S. Chamber of Commerce, Peter Edie, says that lack of complaints does not necessarily mean that businesses haven't had a number of problems with WARN, and the nearly 50 court cases — and their attended costs — are a possible area of concern. Also, the GAO report is expected to shed light on problems brought out by business.

—Brent Fine
Arizona Economic Trends Editor

Notes:

1. "Plant Closing: Advance Notice and Rapid Response—Special Report," U.S. Congress, Office of Technology Assessment, September 1986, Appendix B: State and Local Advance Notice Programs, pp. 56-60,
2. "President Yields on Layoffs Bill," *Associated Press* article published in *The Arizona Republic*, Aug. 3, 1988, p. A6.
3. "Plant-closing law loophole mulled," Baltimore Sun article published in *The Phoenix Gazette*, Aug. 3, 1988, p. A3.
4. "Plant Closing: Advance Notice and Rapid Response—Special Report," U.S. Congress, Office of Technology Assessment, September 1986, Appendix B: State and Local Advance Notice Programs, p 1.
5. Ibid, p. 5.
6. "How often do workers receive advance notice of layoffs?" Sharon P. Brown, *Monthly Labor Review*, U.S. Department of Labor, Bureau of Labor Statistics, June 1987, pp. 13-17.
7. Ibid.
8. "WARN and the States: Implementation of the Federal Plant Closing Law," John Portz, presented at the Annual Meeting of the Midwest Political Science Association, Chicago, Ill., April 1992.
9. "Statement on the Worker Adjustment and

Finance, Insurance, and Real Estate

And then there were none. Arizona's last major locally owned bank, **Valley National Bank**, has been **sold to Banc One Corp. of Columbus, Ohio**, and will be called Banc One Arizona. Pending government approval, the new operations are expected to begin around January 1993. Jobs of the 7,300 Valley employees at 206 offices in Arizona are expected to be secure and expansion may be in the future plans, a Banc One official said. The recent merger of BankAmerica and Security Pacific has increased the stakes in Arizona and likely prompted Valley's sale.

A group led by former baseball Commissioner Peter Ueberroth has agreed to purchase 49 bank branches in Arizona formerly operated by BankAmerica Corp., Security Pacific Bank, and Caliber Bank. If given regulatory approval, Independent Bancorp will take over deposits, loans, and assets for the branches and keep their 400 employees, with the possibility of employment doubling as the bank grows. The deal is expected to close in September.

Mining

Pending government approval, a **Canadian company plans to operate an open-pit copper mine four miles west of Miami** by 1994, which is expected to create up to 225 jobs and have an annual payroll of $7 million to $8 million. **Carolota Copper Co.**, a subsidiary of Cambior Inc. of Montreal, has already invested $2.5 million in the project and plans to spend about $50 million overall to start up the mine, which the company estimates will produce 20,000 to 25,000 tons of a copper a year.

Government

The **city of Phoenix expects to eliminate about 200 jobs** to cover a $13 million to $15 million shortfall when it finalizes its 1992-93 budget in June. The cuts are expected to occur across the board — from police and fire positions to jobs in the parks and recreation department and libraries. The city, which employs about 11,000 workers, has eliminated more than 300 jobs the past 12 months.

Retraining Notification Act," *Public Papers of the Presidents of the United States, Ronald Reagan, 1988-89, Book 2*, Office of the Federal Register, pp. 1009-1010.

10. "Reagan, Bowing to Pressure, Won't Veto Plant-Closing Bill," *Washington Post*, Aug. 2, 1988, p. A1.
11. "Plant Closing: Advance Notice and Rapid Response—Special Report," U.S. Congress, Office of Technology Assessment, September 1986, Appendix B: State and Local Advance Notice Programs, p 2.
12. "Easing the worker's transition from job loss to employment," Ruth H. Fedrau, *Monthly Labor Review*, U.S. Department of Labor, Bureau of Labor Statistics, May 1984, pp. 38-40.
13. "The Private and Public Sector Costs of Proposed Mandatory Advance Notification Legislation," Robert R. Nathan Associates, Inc., Washington D.C., January 1988, PP. 18-22.
14. "Plant Closing: Advance Notice and Rapid Response—Special Report," U.S. Congress, Office of Technology Assessment, September 1986, Appendix B: State and Local Advance Notice Programs, p 2.
15. "The Private and Public Sector Costs of Proposed Mandatory Advance Notification Legislation," Robert R. Nathan Associates, Inc., Washington D.C., January 1988, p. 8.
16. "WARN and the States: Implementation of the Federal Plant Closing Law," John Portz, presented at the Annual Meeting of the Midwest Political Science Association, Chicago, Ill., April 1992, p. 8.
17. Ibid., p. 9.
18. Ibid., p. 9.
19. The Mass Layoff Statistics (MLS) program identifies "mass-layoff events" through unemployment insurance files of initial claimants. An initial claimant is an individual who has just become unemployed, files for U.I. benefits, and has earned enough wages to qualify for some level of benefit payment. For most states, when 50 or more U.I. initial claims are filed against a company in any given contiguous three-week period, it is flagged as potentially having had a major layoff. The employer is then contacted to determine if a mass layoff had occurred, how many employees were laid off, and the reason(s) for the layoff.

Jobless Rate Rose Slightly in March

(continued from page 7)

gains in school-related jobs.

Employment in mining and TCPU (transportation, communications and public utilities) was up slightly over February.

In summary, while the national economy continues to sputter along, Arizona appears to be showing some hints of a rebound. With attractive interest-rate reductions, pent up demand for housing, and an eager-to-work labor force, Arizona's construction employment appears to be showing some signs of improvement. However, defense-related manufacturing continues to exact a toll against employment gains in Arizona with further losses anticipated.

—Don Webbey,
RA Economist

ARIZONA ECONOMIC TRENDS

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JTPA Program Assists, Trains Out-of-Work

Note: In light of the number of major layoffs that have occurred nationally and in Arizona in the past few years, articles in the April, May, and June issues of Arizona Economic Trends are looking at several pieces of federal legislation designed to soften the blow — for laid-off workers, as well as local communities — when massive displacement of workers occurs. The articles are explaining the functions of the laws, plus their results and effectiveness on a national and statewide basis.

In the April issue, two stories focused on the Mass Layoff Statistics (MLS) program, an eight-year-old, data-collection program that tracks layoffs of 50 or more workers — through unemployment insurance records — in nearly all states and Washington D.C. Last month's issue focused on the Worker Adjustment and Retraining Notification Act (WARN), which took effect in early 1989 and, with some exceptions, requires medium-size and large companies to give early notification to workers and communities when they plan major layoffs or are closing. And this month, Arizona Economic Trends looks at the Job Training Partnership Act's Title III program, which provides job-search skills and retraining for displaced workers to speed their re-entry into the workforce.

Third in a series

"Companies may slash 700,000 jobs this year"

"Hughes to cut 8,500 jobs"

"BankAmerica plans job cuts — Up to 12,000 in 3 years"

News headlines about permanent layoffs and plant shutdowns have become distressingly familiar in Arizona and across the nation the past several years, overshadowing any positive economic news — such as lower interest rates — and making workers more fearful about their future. And says Dan Lacey, employment authority and editor of *Workplace Trends*, the bad news is far from over.

MASS
LAYOFFS

According to Lacey, major employers permanently cut an estimated 316,000 U.S. jobs in 1990 and 556,000 jobs in 1991, with probably more than another estimated 400,000 permanent cuts expected this year. However, what may be more shocking news, is that cuts like these have been going on since the late 1970s, but not many people noticed, says Lacey, whose publication tracks employment by major corporations.

" 'The point is that this process is a historic one going on for many years,' " Lacey was quoted as saying earlier this year in *USA Today*. " 'It will continue for the foreseeable future, probably into the 21st century.' "[1]

Lacey says that major corporations began downsizing in the late 1970s. But until the recent recession most of the full-time permanent employment losses went unnoticed by the media. Fortune 500 companies' employment,

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says Lacey, has dropped from 16 million in the late '70s to around 12 million currently and will likely fall to 8 million by the end of the century.

Of course, mass layoffs and plant shutdowns are not a new phenomenon in this country's post-World War II economic history. But as pointed out in the April and May issues of *Arizona Economic Trends*, whereas the majority of layoffs and plant shutdowns prior to the 1980s tended to be temporary and for shorter periods — due to a normal cycle of economic slowdown — mass layoffs of recent times are increasingly of the permanent variety and are being driven by a number of factors.

Some of the reasons are: a lingering sluggish economy, likely to continue to grow slowly as consumers pay off debt and remain fearful about the future; a shrinking manufacturing base due to increased world competition, which has forced companies to restructure and cut staff to core levels to remain competitive; debt-burdened companies — due to the excesses of expansion and mergers of the '80s — facing bankruptcy and forced to cut positions to remain afloat; and defense and related manufacturers slashing jobs as government contracts dry up.

The end result has been a major upheaval in the U.S. workforce — particularly among those who lack a college education or are in a declining industry — with laid-off workers (and those just entering the workforce) having to work harder than ever to find employment. In recent years, fewer and fewer laid-off workers have found comparable-paying jobs upon re-entering the workforce; another segment has been forced to go back to school or enter training or retraining programs; and still others, frustrated at not finding work, have given up and are now among the nation's estimated 2 million discouraged workers.

Need to Retrain Laid-Off Workers

The intensity and structural nature of recent mass layoffs leads to two important questions: Short-term — How does the country get laid-off workers back into the workforce quickly and into long-term jobs? Long-term — How can the country avoid a similar problem in the future?

> ***"The worker-assistance center has consistently proven to be the most cost-effective, efficient approach for laid-off workers. ... It allows for an intensive re-employment effort to be mounted on behalf of the workers ... "***
>
> ***—Ruth H. Fedrau, Developer of Employee-Training Programs***

Regarding the latter, recent trends and a more competitive world economy have sent a major signal to workers, employers, and public officials about the need for a well-defined, long-term strategy for the country's workforce needs, says a recent U.S. Labor Department study. "No longer are these economic dislocations seen simply as an unfortunate side effect of economic progress; instead, they are viewed as a warning that the nation must prepare today's workers for jobs of the future," the report says.[2]

Along this same line, several recent reports have concluded that for the U.S. workforce to be competitive in a world economy, it must be more adaptable and have higher levels of education and training by the end of this century.[3] But, in addition, Lacey says that a change in philosophy regarding government programs, such as unemployment insurance (U.I.), will be necessary for any plans to work.

Current and future jobs, on average, will last seven years, says Lacey, and because of that workers will need to be able to take time off — without loss of U.I. benefits — five or six times in their lifetime for meaningful retraining. "We're admitting that future jobs will frequently change and workers will have to take a breather (to retrain)," Lacey says.

While these policies are being formed, however, there is a more pressing need for short-term solutions to find jobs for the unemployed, particularly the structurally dislocated worker. And one approach that has come to the fore in the last two decades are re-employment assistance programs, which offer services such as job counseling, job-search skills, and retraining. The focus of the rest of this article will be on the primary federal program involved in this area, the Job Training Partnership Act's Title III program.

Overview of Retraining Programs

Today's Title III program primarily evolved out of voluntary plant-closure practices of large corporations during the 1960s and '70s.[4] As part of benefit packages, companies such as Armour, Brown and Williamson, and Goodyear Tire and Rubber began offering outplacement and retraining services to laid-off workers.

Although given in part for paternalistic motives, both the employer and employee recognized the benefits of easing the worker's transition from job loss to employment. For the employee, it helps develop job-hunting or training options, as well as maintain morale by showing the company treats its workers with compassion; for the employer, the advantages include maintaining the morale of employees leaving and staying, and reducing costs by limiting the time that unemployment insurance and other benefits are paid to laid-off employees.

Around the same time, states such as California began pioneering efforts to help dislocated workers by forming public-private partnerships with small and large companies to develop plant-based and community-based placement programs and comprehensive worker-assistance centers. “The worker-assistance center has consistently proven to be the most cost-effective, efficient approach for laid-off workers,” said Ruth Fedrau, a developer of employee training programs, in an article in the May 1984 issue of *Monthly Labor Review*.[5] “It allows for an intensive re-employment effort to be mounted on behalf of the workers, direct participation by the company and union, and effective coordination of funds and resources.”

One of the first pieces of federal legislation that offered retraining to displaced workers was the Manpower Development and Training Act (MDTA) of 1962, which provided funds to retrain workers displaced by new technology. But when little dislocation occurred, the program's funds were shifted to help the poor and unemployed.[6]

Then in 1974, Congress created the Trade Adjustment Assistance (TAA) program, which offered employment assistance and income maintenance to workers who were displaced due to foreign competition and is still in effect today. The TAA's target group, however, was limited in scope, and when new job-training legislation was proposed in 1982 — the Job Training Partnership Act (JTPA) — Congress decided that a more far-reaching program — one that involved public- and private-sector cooperation — was needed to assist workers dislocated for a wide variety of reasons.

But with the enactment of any new legislation as comprehensive as JTPA — which offers job-training for a variety of groups (e.g., disadvantaged adults, youth during summer) — there are usually a number of start-up problems, as was the case with Title III program during its first few years of operation. According to a recent Labor Department report, the initial Title III program had a number of perceived flaws, including:[7]

- an inability to respond quickly when mass layoffs occurred;
- an overemphasis on job-search assistance and short-term training;
- a lack of organizational structure and access to special funding when the need occurred;
- and a lack of consistency in the program from state to state, with some states giving the help needed for maintain long-term employment, while in others the program was only offering basic job assistance (e.g., job interview skills).

To deal with these perceived problems and strengthen Title III, Congress passed the Economic Dislocation and Worker Assistance Act (EDWAA) in 1988, which took effect

Table 1

Example of Rapid-Response Activities and Subsequent Services

To better understand how the JTPA Title III program works, following is a brief overview of what events would likely occur after a company announces a mass layoff and uses the dislocated-worker program. Dislocations due to mass layoffs are currently the largest source of Title III clients.

July 1	XYZ Co. announces it will move its plant to another state, laying off about 100 employees, and files a WARN notice with the state's Dislocated Worker Unit (DWU).
July 5	A representative from DWU's rapid-response team contacts XYZ and asks if the company would be interested in using Title III services. Company agrees and sets up a meeting with rapid-response representative to discuss specifics of layoff and find out what services are available.
July 19	At initial meeting, XYZ gives details about layoff, including type of employees affected; what unions, if any, are involved; and timetable for layoffs. At same time, DWU representative explains in detail Title III services available — job-search skills, job training, counseling — and discusses with employer where employee-assistance center will be located (on or away from workplace).
Aug. 2	At second meeting, members of rapid-response team, company, and union or employee representatives discuss employee needs and if additional resource requirements (e.g., discretionary funds) are needed, then DWU develops service plan over next couple of weeks.
Aug. 16	Employee-assistance center opens at off-site location with orientation meeting. Employees seeking services sign up and attend a series of employability workshops, which give information on subjects such as labor-market conditions, resume writing, and interviewing and job-search skills; those considered for retraining may take job-aptitude tests.
Aug. 23	Clients begin receiving job counseling and develop long-term employability plan. Those with transferrable skills begin looking for jobs with help of assistance center, while others begin retraining programs.
Oct. 16	Eight to 10 weeks after employee-assistance center opens, clients with transferrable skills that are unsuccessful in landing new jobs are reconsidered for job retraining.

in July 1989. Some of the ways EDWAA changed the Title III program were:[8]

- to set up a network of substate organizations to run local-area, dislocated-worker programs and require that 60 percent of the state's Title III funding go to substate groups, with 50 percent of that funding going to retraining;
- to set up a rapid-response units at the statewide and substate level to contact companies (preferably within 48 hours) after they announce major layoffs in order to quickly initiate a dislocated-worker assistance program;
- to promote labor-management cooperation in designing and implementing services for dislocated workers;
- and to encourage states to take a long-term view for worker re-adjustment in their Title III programs, by including meaningful retraining programs and long-term re-employment plans.

Arizona's Title III Program

The Department of Economic Security's JTPA Administration oversees Arizona's Title III program, with a four-person Dislocated Worker Unit in Phoenix handling statewide Title III functions and four substate programs carrying out local-area activities. The four substate programs are: City of Phoenix; Maricopa County, except City of Phoenix; Southern Arizona, which operates out of Tucson and covers Pima, Cochise, Santa Cruz, and Yuma counties; and Northern Arizona, which operates out of Globe and covers the rest of state's counties.

Some of the responsibilities of the statewide program, which receives 40 percent of the state's annual funding, include: overall program administration; statewide rapid-response activities (see below); facilitating re-adjustment services (e.g., job-search skills, retraining); acting as a clearinghouse of information on plant closings and mass layoffs (including WARN notices); providing technical information on rapid-response activities; and submitting proposals for discretionary Title III grants when the need arises, such as the closure of Williams Air Force Base (see below).

Table 2

Typical Services Available at Worker-Assistance Centers

Orientation and Benefits Counseling — Explanation of services available, encourage worker participation, and provide information on employee benefits such as severance pay and early retirement options.

Self-Help Re-employment Assistance — Job-search workshops, job clubs, assistance with resume development, resource materials, and job counseling.

Services to Offset Impact of Job Loss — Individual counseling, stress management workshops, and referrals to social service agencies.

Direct Placement Assistance — Job development, job-placement information and counseling, coordination with the state Job Service and local employment and training agencies, and relocation assistance.

Education and Retraining — Assists in acquiring basic education and occupational skills needed to make transition to new jobs and careers; on-the-job training is usually available.

Source: *U.S. Department of Labor, Bureau of Labor-Management Relations and Cooperative Programs, 1989*

The substate programs, which receive 60 percent of the state's funding, are primarily responsible for: serving as members of the state and their respective local-area rapid-response teams; providing information to the DWU on mass layoffs and plant shutdowns in their local areas; facilitating re-adjustment services for local areas; and developing a localized plan for operating its area's Title III programs, including determining priority groups of clients.

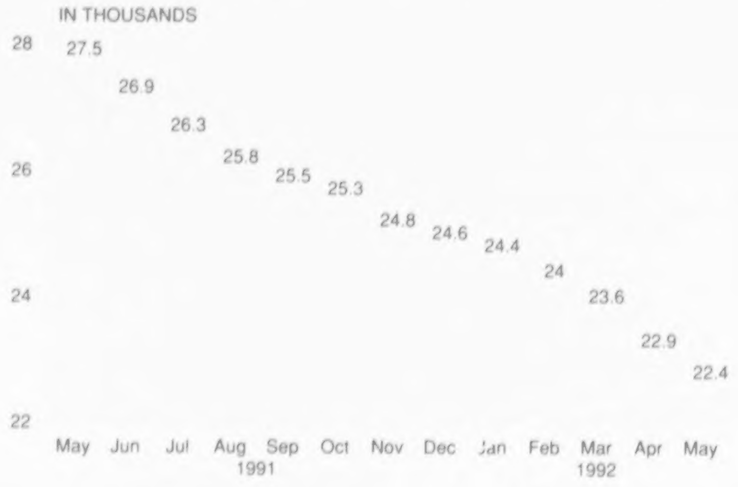
For program year (PY) 1992-93 (July 1, 1992-June 30, 1993), the state's share of federal Title III funding is expected to be about $3.7 million, down about 5 percent from the previous planning year and 30 percent from two planning year's ago. However, the state's basic funding level does not include discretionary grants, which the state can apply for as the need arises and in the last 12 months have added several million dollars to Arizona's funding level (see below).

At the substate level, Arizona allocates its 60 percent dollars based on a formula that takes into account a number of factors, including unemployment rates and the number of long-term unemployed. Following are the current allocation percentages: Northern SSA — 23.7 percent; Southern SSA — 34.7 percent; City of Phoenix SSA — 22.8 percent; and Maricopa County SSA — 18.9 percent.

To qualify for Title III services in Arizona, an unemployed worker must first be eligible under federal standards as a dislocated worker. The Title III program defines a dislocated worker as an unemployed worker who: a) has been laid off, is eligible for or has used up U.I. benefits, and is unlikely to return to a previous industry or occupation; or b) had been terminated due to a permanent plant closing; or c) was among the long-term unemployed (15 or more weeks)

Figure 1

Arizona Aircraft and Missiles Wage and Salary Employment, May 1991-May 1992



Source: Arizona Dept. of Economic Security, Research Administration, June 1992

and had little or no chance of being re-employed in the same or similar occupation.

Beyond that, both Arizona's statewide program and each substate area select priority groups of dislocated workers they wish to serve first. For example, Arizona's statewide program gives its highest priority to dislocated workers with lower educational attainment (e.g., lack of high school degree), while the Southern Arizona substate program area has two high priority groups: those who are unlikely to return to their previous industry or occupation and those laid off due to business closure (usually in mass layoffs).

According to the state's Title III plan, at a minimum, about 1,300 dislocated workers will be "served" — receiving job-search assistance or retraining — by the statewide and substate programs during PY 1992-93 from basic funding. But in addition, Arizona will likely serve another couple of thousand during the program year through funding from discretionary grants.

Tommy Landa, Arizona JTPA Targeted Programs Manager and head of the state's Dislocated Worker Unit, estimates that through basic funding the state currently serves about 5 to 8 percent of persons who are eligible for the Title III program. And of those, its equally divided among persons receiving basic re-adjustment services (e.g., resume writing — see Table 2) and some form of training. However, because of the high cost of training, less than one-quarter of the clients overall have been receiving long-term training (26 weeks or more), which may lead to the best opportunity for finding work and higher wages.

As far as areas of training currently being emphasized, the director of the Regional Re-employment Center in Tucson, which operates the Southern Arizona substate re-assistance program, says that medical- and environmental-related occupations are drawing a lot of attention because many of his current clients can make an easy transition to those sectors. For example, says Armando Sanchez, engineers currently being laid off at Hughes Aircraft Co. may only have to take short-term certification program (eight to 16 weeks) at a community college to qualify for certain technical jobs in those industries. Sanchez says about 20 unemployed software programmers at his center have recently taken an 8- to 12-week course in a medical software program being used by hospitals.

EDWAA Emphasizes Rapid Response

With the passage of EDWAA, a major emphasis of the Title III program became serving dislocated workers affected by mass layoffs and making sure help is given as quickly as possible. A 1986 Congressional report on plant closings pointed out: "... it is difficult even to let workers know that help is available after they are out of work and out of touch."[9]

As mentioned earlier, EDWAA requires each state to set up rapid-response teams within DWUs, along with several mechanisms to make Title III services available to employers and employees within a short period of time. In most states, including Arizona, rapid-response teams consist of the state's Dislocated Worker Unit — along with other public-support agencies (e.g., Job Service, Unemployment Insurance) — that organize a broad-based response to a dislocation event (see Table 1). (In Arizona, a rapid-response team responds to layoffs that involve 20 or more persons, or 10 percent of the company's workforce.)

Landa says ideally his rapid-response unit would like to begin helping workers eight weeks before they are laid off, but in practice his DWU usually has only two to three weeks. Landa says having additional pre-layoff time is crucial for having a successful re-assistance program because at first, laid-off workers are upset and not ready to find new work, and because it usually takes several weeks — and longer in the case of discretionary grants — to develop a comprehensive re-adjustment program.

"It takes from two weeks to four

months (depending on the number of workers' involved) to prepare a comprehensive adjustment program, including testing and assessment, counseling, job-search skills training, job development, vocational skills training, and remedial education," Landa says.

But getting access to laid-off employees before they hit the street is not always an easy process. For a variety of reasons, many of the companies having mass layoffs — particularly in Maricopa County — refuse to work with or are not aware of the Title III program, Landa says. And although employees who are eligible for Title III services can still use them without employer participation, many times they are not made aware of the program until they are leaving the company, which decreases their chances of finding work quickly.

On the other hand, Pima County's program has had a lot of success in getting employers to participate in Title III programs, Landa says, through its reputation, by building trust between the employer and government, and by making the company aware of what the program can offer. "We've had a good track record and developed a good relationship with employers," says Sanchez. "When they're not laying off people, they're hiring. They got to know who you are and trust you."

Measuring Success of Program

Although employer participation is one way of telling the success of a state's Title III programs, there are other ways to measure their effectiveness. One of the primary ways is through a wide range of data JTPA collects on Title III programs at the substate, state, and national level.

Some of these measures include: the percentage of Title III participants that find employment and are still employed 90 days later, known as the "entered employment rate" and "employment rate at follow-up," respectively; the number and cost of participants served; and clients' wages prior to a layoff and after re-employment.

In both program years 1989 and 1990, for instance, Arizona's Title III programs overall had much higher "entered employment rates" and "employment rates at follow-up" than nationally. The U.S. rates for those two categories in PY 1989 were 68 and 71 percent, respectively, compared to Arizona's 86 and 77 percent. And in PY 1990, the U.S. rates were 70 and 71 percent, compared to Arizona's 89 and 85 percent.

On the surface, Arizona's high rates of success in re-employing people are impressive. But Landa says the rates also reflect the fact that some of the state's Title III programs are not attracting enough high-salaried clients, who may have a harder time in finding comparable-paying jobs. Only about 10 percent of the clients in the City of Phoenix and Maricopa County Title III programs are making $35,000 or above, Landa says.

Also, data on money spent per client in Arizona may indicate that not enough intensive training for high-end jobs is being given. In program years '89 and '90, for example, two categories showing the cost of Title III clients — "cost per participant" and "cost per entered employment" — indicate that Arizona spent per client about one-third to one-half what was spent nationally. In PY 1990, nationally an average of $1,384 was spent per participant and $3,360 was spent per client that found employment. In Arizona, however, the cost per participant was $857 and cost per entered employment was $1,803.

But it appears, at least of late, that the state's programs are re-employing clients fairly close to the wages they received prior to losing their jobs. Data available on three of Arizona's four substate programs, for the period of July 1, 1991 through March 31, 1992, show that Title III clients were being re-employed at about 80 percent of their previous wages. And in the Southern Arizona program, clients were receiving about 86 percent of their previous wages, which is well above that substate area's target of between 70 and 80 percent.

Arizona Snags Discretionary Funds

Finally, when Congress initially set up the Title III program, it decided that 25 percent of the program's annual funding — about $120 million for fiscal year 1993 (Oct. 1, 1992-Sept. 30, 1993) — would go into a discretionary pool to assist workers dislocated by special events, such as large mass layoffs, natural disasters, Federal government actions, or in areas of high unemployment.[10] Then, as the need arises, each state can apply for discretionary money.

The big advantage of discretionary grants is that all of the money must be used for specific projects, which allows states to spend more time planning for its allocation. Also, 50 percent of Title III clients funded by discretionary grants must receive some form of training, which tends to guarantee a higher rate of job placement.

Currently, discretionary grants are playing a major role in Arizona's Title III funding, primarily because of the current and anticipated loss of defense industry jobs. The Defense Department recently projected that Arizona will permanently lose about 17,000 military and civilian jobs, or one of three nationally, over the next six years due to planned cutbacks in defense spending.[11] And Figure 1 gives evidence to their impact over the past year.

Over the past 12 months, Arizona's JTPA program has landed six discretionary grants. Among the largest are: $2.25 million to help dislocated workers in Arizona's aerospace industry, hurt by defense cutbacks and a sluggish airline industry; $1.25 million for employees at Hughes Aircraft Co., which has laid off several thousand employees at its missile plant in Tucson; and $2 million for civilian and military employees at Williams Air Force Base, which will shut down in 1993.

(continued on page 13)

Jobless Rate Fell Sharply in April Throughout State

Arizona's seasonally adjusted unemployment rate declined eight-tenths of one percentage point in April to 7.5 percent. This is the largest decline in the rate since it began moving up from 4.6 percent a year ago. Notably, the seasonally adjusted unemployment rate dropped in all 15 counties in April, where the rates ranged from a low of 5.1 percent in Pima County to a high of 20.7 percent in Yuma County.

The state's total employment increased significantly in April, up 29,500. Most of the increase was due to a rise in the number of self-employed persons. Also, the number of multiple jobholders — individuals with two or more jobs — decreased sharply during the month.

ARIZONA'S WORKFORCE

As might be expected with a sharply lower rate, total unemployment in Arizona declined in April by 17,300, the largest over-the-month drop since September 1983. Much of this improvement was the result of fewer out-of-state job seekers moving to Arizona and fewer people entering the labor force looking for work.

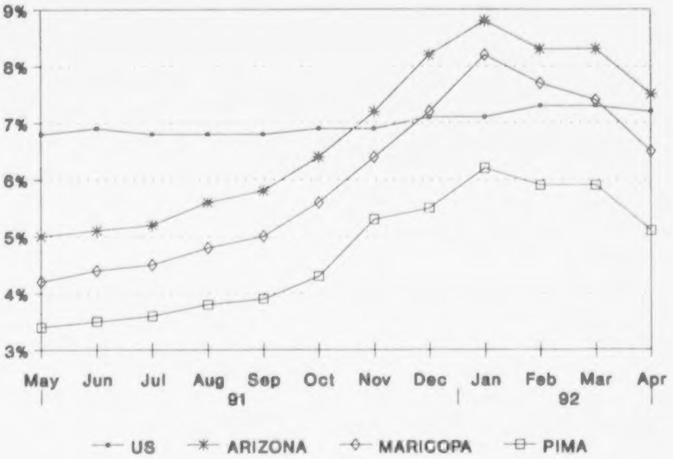
Arizona's non-farm wage and salary employment was essentially unchanged from March levels. Over-the-month gains job gains occurred in only two major industry groups — construction and FIRE (finance, insurance, and real estate). Employment in TCPU (transportation, communications, and public utilities) was unchanged in April, while all other industry groups declined with trade and services losing the most. Over the year, wage and salary employment was up 4,500, for a modest three-tenths of one perent gain.

Construction Jobs Up 2.6 Percent

Statewide, construction added 2,000 new jobs in April, for an over-the-month increase of 2.6 percent. And since April 1991, construction employment in Arizona grew by 2,800. As was the case in March, the subindustry of special trades contributed the most to construction's gains, adding some 1,500 jobs in April.

Figure 1

U.S., Arizona, Maricopa County, and Pima County Unemployment Rates (Seasonally Adjusted), May 1991-April 1992



Source: Arizona Dept. of Economic Security, Research Administration, May 1992

Maricopa County added the bulk of the new construction jobs (1,300, or a 2.6 percent gain) with most of the gains in special trades. Since April 1991, 4,600 more construction jobs were added in Maricopa County, representing an over-the-year increase of 2.3 percent. In Pima County, construction employment increased 2.1 percent in April with 300 jobs added. This represents a robust 8 percent increase, or 900 more jobs, since April 1991. Over-the-month gains occurred in special trades, and general and heavy construction.

Grouping Arizona's northern counties (La Paz, Mohave, Coconino, Yavapai, Navajo, and Apache), construction gains occurred in every category with heavy and general construction leading the way. Construction-related growth in the northern counties even helped manufacturing sectors, such as fabricated metals, to add jobs. Meanwhile, the state's southern non-metro counties (Yuma, Santa Cruz, Cochise, Graham and Greenlee) as a whole showed slight employment gains in construction, but only in special trades and heavy construction.

Arizona's trade and services sectors each lost about 700 jobs in April. Typically, seasonally related employment losses occur in these industries in the Phoenix and Tucson metropolitan areas as summer approaches and the tourist industry slows, but a slow national economy exacerbated tourism losses in April.

In Arizona's trade industry, both wholesale and retail groups lost employment. Heavy retail trade losses in Maricopa County (-800) were responsible for retail trade's overall sharp drop with most of the decline occurring in the subindustries of food stores, and eating and drinking places; wholesale trade employment in Maricopa County was virtually unchanged. In Pima County, trade lost 200 jobs, including declines in both

(continued on back page)

Table 1
Arizona Labor Force, Employment, and Unemployment Data, April 1992[a]

(In Thousands)

	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991	Monthly/Yearly Change: Mar. '92 - Apr. '92	Monthly/Yearly Change: Apr. '91 - Apr. '92
Total Civilian Labor Force[d]	**1737.4**	**1725.2**	**1711.2**	**12.2**	**26.2**
Total Unemployment	**127.9**	**145.2**	**78.6**	**-17.3**	**49.3**
Unemployment Rate	**7.4%**	**8.4%**	**4.6%**	**—**	**—**
Unemployment Rate (Seasonally Adjusted)[e]	**7.5%**	**8.3%**	**4.8%**	**—**	**—**
Total Employment	**1609.5**	**1580.0**	**1632.6**	**29.5**	**-23.1**
Total Wage and Salary Employment[f, g]	**1509.5**	**1509.5**	**1505.0**	**0.0**	**4.5**
Private Sector	1223.6	1223.3	1224.4	0.3	-0.8
Government	285.9	286.2	280.6	-0.3	5.3
Goods-Producing Industries	**261.0**	**259.5**	**266.2**	**1.5**	**-5.2**
Manufacturing	**168.4**	**168.8**	**176.9**	**-0.4**	**-8.5**
Total Durable Goods	124.8	125.1	133.2	-0.3	-8.4
Stone, Clay, and Glass	5.2	5.1	5.5	0.1	-0.3
Primary and Fabricated Metals	13.5	13.4	14.1	0.1	-0.6
Primary Metals	5.6	5.6	5.9	0.0	-0.3
Fabricated Metals	7.9	7.8	8.2	0.1	-0.3
Machinery	52.7	52.6	55.1	0.1	-2.4
Aircraft and Missiles	22.9	23.6	27.9	-0.7	-5.0
Lumber and Wood Products (Excluding Furniture)	6.4	6.3	6.0	0.1	0.4
Total Nondurable Goods	43.6	43.7	43.7	-0.1	-0.1
Food and Kindred Products	10.0	10.1	9.5	-0.1	0.5
Printing and Publishing	15.5	15.5	15.9	0.0	-0.4
Mining and Quarrying	**14.0**	**14.1**	**13.5**	**-0.1**	**0.5**
Copper Mining	11.8	11.7	11.0	0.1	0.8
Construction	**78.6**	**76.6**	**75.8**	**2.0**	**2.8**
Service-Producing Industries	**1248.5**	**1250.0**	**1238.8**	**-1.5**	**9.7**
Transportation, Communication, and Public Utilities	**79.9**	**79.9**	**81.3**	**0.0**	**-1.4**
Transportation	45.4	45.3	46.5	0.1	-1.1
Communications and Public Utilities	34.5	34.6	34.8	-0.1	-0.3
Trade	**372.6**	**373.3**	**373.0**	**-0.7**	**-0.4**
Total Wholesale Trade	74.9	75.1	74.8	-0.2	0.1
Total Retail Trade	297.7	298.2	298.2	-0.5	-0.5
General Merchandise and Apparel	49.1	48.7	48.1	0.4	1.0
Food Stores	50.4	51.0	50.1	-0.6	0.3
Automotive and Service Stations	34.6	34.5	33.9	0.1	0.7
Eating and Drinking Places	105.5	105.5	107.2	0.0	-1.7
Finance, Insurance, and Real Estate	**91.7**	**91.5**	**92.9**	**0.2**	**-1.2**
Services and Miscellaneous	**418.4**	**419.1**	**411.0**	**-0.7**	**7.4**
Hotels and Lodging Places	40.5	40.5	41.4	0.0	-0.9
Business Services	86.7	86.6	83.2	0.1	3.5
Health Services	107.9	108.5	103.9	-0.6	4.0
Government	**285.9**	**286.2**	**280.6**	**-0.3**	**5.3**
Federal	45.0	44.9	45.1	0.1	-0.1

Notes and Source: See Table 3

Table 2

Maricopa County Labor Force, Employment, and Unemployment Data, April 1992[a]

(In Thousands)

	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991	Monthly/Yearly Change Mar. '92 - Apr. '92	Monthly/Yearly Change Apr. '91 - Apr. '92
Total Civilian Labor Force[d]	1062.2	1049.8	1062.0	12.4	0.2
Total Unemployment	68.7	78.3	42.6	-9.6	26.1
Unemployment Rate	6.5%	7.5%	4.0%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	6.5%	7.4%	4.1%	—	—
Total Employment	993.5	971.5	1019.4	22.0	-25.9
Total Wage and Salary Employment[f, g]	**983.2**	**983.2**	**987.8**	**0.0**	**-4.6**
Private Sector	759.9	761.9	771.7	-2.0	-11.8
Government	146.6	146.9	144.0	-0.3	2.6
Goods-Producing Industries	**403.9**	**404.9**	**416.2**	**-1.0**	**-12.3**
Manufacturing	**125.9**	**126.3**	**133.0**	**-0.4**	**-7.1**
Total Durable Goods	94.8	95.1	101.9	-0.3	-7.1
Stone, Clay, and Glass	2.8	2.8	3.2	0.0	-0.4
Primary and Fabricated Metals	9.2	9.2	9.8	0.0	-0.6
Machinery	43.9	43.9	46.0	0.0	-2.1
Total Nondurable Goods	31.1	31.2	31.1	-0.1	0.0
Food and Kindred Products	7.2	7.2	6.9	0.0	0.3
Printing and Publishing	10.9	10.9	11.1	0.0	-0.2
Mining and Quarrying	**0.8**	**0.7**	**0.8**	**0.1**	**0.0**
Construction	**52.0**	**50.7**	**49.7**	**1.3**	**2.3**
Service-Producing Industries	**804.5**	**805.5**	**804.3**	**-1.0**	**0.2**
Transportation, Communication, and Public Utilities	**55.6**	**55.5**	**57.7**	**0.1**	**-2.1**
Transportation	33.4	33.2	35.1	0.2	-1.7
Communications and Public Utilities	22.2	22.3	22.6	-0.1	-0.4
Trade	**244.6**	**245.4**	**248.1**	**-0.8**	**-3.5**
Total Wholesale Trade	56.6	56.6	57.6	0.0	-1.0
Total Retail Trade	188.0	188.8	190.5	-0.8	-2.5
General Merchandise and Apparel	31.0	31.1	30.6	-0.1	0.4
Food Stores	31.9	32.4	32.4	-0.5	-0.5
Automotive and Service Stations	21.4	21.3	21.0	0.1	0.4
Eating and Drinking Places	67.5	67.7	68.9	-0.2	-1.4
Finance, Insurance, and Real Estate	**73.2**	**73.1**	**74.3**	**0.1**	**-1.1**
Services and Miscellaneous	**284.5**	**284.6**	**280.2**	**-0.1**	**4.3**
Hotels and Lodging Places	24.6	24.9	25.0	-0.3	-0.4
Business Services	70.3	69.9	67.6	0.4	2.7
Health Services	69.8	70.2	67.1	-0.4	2.7
Government	**146.6**	**146.9**	**144.0**	**-0.3**	**2.6**

Notes and Source: See Table 3

Table 3

Pima County Labor Force, Employment, and Unemployment Data, April 1992(a)

(In Thousands)

				Monthly/Yearly Change	
	Apr. 1992(b)	Mar. 1992(c)	Apr. 1991	Mar. '92 - Apr. '92	Apr. '91 - Apr. '92
Total Civilian Labor Force(d)	324.6	321.4	312.5	3.2	12.1
Total Unemployment	16.2	19.0	10.1	-2.8	6.1
Unemployment Rate	5.0%	5.9%	3.2%	—	—
Unemployment Rate (Seasonally Adjusted)(e)	5.1%	5.9%	3.3%	—	—
Total Employment	308.4	302.4	302.4	6.0	6.0
Total Wage and Salary Employment(f, g)	267.3	267.4	261.2	-0.1	6.1
Private Sector	203.1	203.3	199.2	-0.2	3.9
Government	64.2	64.1	62.0	0.1	2.2
Goods-Producing Industries	41.1	40.8	41.1	0.3	0.0
Manufacturing	23.9	23.9	25.0	0.0	-1.1
Total Durable Goods	18.6	18.7	19.7	-0.1	-1.1
Total Non-durable Goods	5.3	5.2	5.3	0.1	0.0
Mining and Quarrying	2.3	2.3	2.3	0.0	0.0
Construction	14.9	14.6	13.8	0.3	1.1
Service-Producing Industries	226.2	226.6	220.1	-0.4	6.1
Transportation, Communication, and Public Utilities	10.6	10.6	9.7	0.0	0.9
Transportation	6.0	6.0	5.3	0.0	0.7
Communications and Public Utilities	4.6	4.6	4.4	0.0	0.2
Trade	62.6	62.8	61.4	-0.2	1.2
Total Wholesale Trade	9.1	9.1	8.8	0.0	0.3
Total Retail Trade	53.5	53.7	52.6	-0.2	0.9
General Merchandise and Apparel	7.9	7.8	7.7	0.1	0.2
Food Stores	8.3	8.3	8.2	0.0	0.1
Automotive and Service Stations	5.5	5.6	5.4	-0.1	0.1
Eating and Drinking Places	19.3	19.3	19.2	0.0	0.1
Finance, Insurance, and Real Estate	11.7	11.7	11.5	0.0	0.2
Services and Miscellaneous	77.1	77.4	75.5	-0.3	1.6
Hotels and Lodging Places	7.0	7.0	7.0	0.0	0.0
Business Services	12.2	12.5	11.4	-0.3	0.8
Health Services	23.1	23.1	22.6	0.0	0.5
Government	64.2	64.1	62.0	0.1	2.2

Notes:
a) Data on labor force, total unemployment, total employment, and seasonally adjusted unemployment rate should not be used for economic-assistance programs. Data for economic-assistance programs are available by contacting DES, Research Administration
b) Preliminary and subject to revision following month
c) Revised
d) Adjusted to Current Population Survey (CPS) to reflect place of residence
e) Normal seasonal variations have been eliminated to reflect underlying trends
f) By place of work; does not include agricultural workers, self-employed, unpaid family members, and domestic workers
g) Detail may not add up correctly due to rounding
h) Rounded to the nearest one-quarter

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, May 1992*

Table 4

Non-metropolitan Counties' Labor Force, Employment, and Unemployment Data, April 1992[a,b]

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz
Total Civilian Labor Force[d]	15,625	36,150	45,200	13,825	8,400	3,425	6,500
Total Unemployment	2,450	3,125	3,975	1,700	750	300	675
Unemployment Rate	15.7%	8.6%	8.8%	12.4%	9.0%	8.5%	10.4%
Unemployment Rate (Seasonally Adjusted)[e]	16.6%	8.6%	10.4%	12.3%	9.1%	8.5%	11.5%
Total Employment	13,175	33,025	41,225	12,125	7,650	3,125	5,825
Total Wage and Salary Employment[f,h]	15,525	26,550	42,225	12,000	5,425	3,450	3,575
Private Sector	9,750	14,975	28,800	9,000	3,050	2,875	2,600
Government	5,775	11,575	13,425	3,000	2,375	575	975
Goods-Producing Industries	825	2,150	4,525	3,325	375	2,300	550
Manufacturing	475	1,125	3,050	1,400	200	25	250
Mining and Quarrying	25	75	150	1,150	0	2,025	50
Construction	325	950	1,325	775	175	250	250
Service-Producing Industries	14,700	24,400	37,700	8,675	5,050	1,150	3,025
Transportation, Communications, and Public Utilities	1,675	1,475	2,975	450	150	50	175
Trade	1,700	5,625	10,325	2,650	1,500	325	1,225
Finance, Insurance, and Real Estate	375	625	700	250	125	25	125
Services and Miscellaneous	5,175	5,100	10,275	2,325	900	175	525
Government	5,775	11,575	13,425	3,000	2,375	575	975

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
Total Civilian Labor Force[d]	38,700	27,275	39,575	12,225	41,200	62,375
Total Unemployment	3,700	3,825	3,950	1,650	3,300	13,575
Unemployment Rate	9.5%	14.0%	10.0%	13.5%	8.0%	21.8%
Unemployment Rate (Seasonally Adjusted)[e]	9.9%	15.1%	10.4%	19.3%	8.1%	20.7%
Total Employment	35,000	23,450	35,625	10,575	37,900	48,800
Total Wage and Salary Employment[f,h]	27,400	20,750	31,650	11,550	28,300	30,875
Private Sector	22,625	14,275	21,325	9,625	22,975	22,275
Government	4,775	6,475	10,325	1,925	5,325	8,600
Goods-Producing Industries	5,175	3,225	9,100	1,300	5,425	3,025
Manufacturing	2,575	1,575	2,925	975	2,475	1,700
Mining and Quarrying	25	925	5,425	0	1,025	25
Construction	2,575	725	750	325	1,925	1,300
Service-Producing Industries	22,225	17,525	22,550	10,250	22,875	27,850
Transportation, Communications, and Public Utilities	1,375	1,500	875	725	1,000	1,350
Trade	8,575	4,350	5,725	5,425	8,175	9,775
Finance, Insurance, and Real Estate	1,225	525	600	275	975	1,025
Services and Miscellaneous	6,275	4,675	5,025	1,900	7,400	7,100
Government	4,775	6,475	10,325	1,925	5,325	8,600

Notes and Source: See Table 3

Table 5

Estimated Hours and Earnings of Production Workers, by Selected Industry Groups, April 1992[a]

Arizona

Industry	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991
Manufacturing	$444.16	$451.28	$422.50	40.6	41.1	40.2	$10.94	$10.98	$10.51
Aircraft and Missiles	657.12	668.18	653.38	44.4	45.3	45.5	14.80	14.75	14.36
Food and Kindred Products	356.46	360.12	355.27	39.0	39.4	38.7	9.14	9.14	9.18
Primary Metals	488.00	480.73	521.01	40.0	38.8	39.5	12.20	12.39	13.19
Machinery	467.10	479.52	391.95	41.3	42.1	39.0	11.31	11.39	10.05
Copper Mining	656.08	634.25	661.70	44.3	43.0	44.8	14.81	14.75	14.77
Construction	454.86	446.49	442.34	38.0	36.9	36.8	11.97	12.10	12.02
Public Utilities	788.40	788.80	790.32	43.8	42.5	44.5	18.00	18.56	17.76
Retail Trade[d]	280.57	280.03	261.94	32.7	32.6	32.1	8.58	8.59	8.16
Wholesale Trade	395.10	399.38	401.94	37.7	38.0	38.5	10.48	10.51	10.44

Maricopa County

Industry	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991
Manufacturing	$473.30	$478.61	$445.11	41.3	41.8	41.1	$11.46	$11.45	$10.83
Construction	473.30	467.09	472.36	38.2	37.1	37.4	12.39	12.59	12.63
Retail Trade[d]	299.04	297.26	274.21	33.6	33.4	32.8	8.90	8.90	8.36
Wholesale Trade	402.38	402.95	429.73	37.5	37.8	38.3	10.73	10.66	11.22

Pima County

Industry	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991	Apr. 1992[b]	Mar. 1992[c]	Apr. 1991
Manufacturing	$430.14	$408.72	$395.92	40.2	39.0	39.2	$10.70	$10.48	$10.10
Construction	400.71	393.10	379.85	37.0	35.9	35.6	10.83	10.95	10.67
Public Utilities	660.17	650.71	635.09	42.4	41.9	41.7	15.57	15.53	15.23

Notes:
a) Estimates are based on a sample of full- and part-time production and related workers whose payroll and hours are reported for the pay period that includes the 12th of the month
b) Preliminary and subject to revision following month
c) Revised
d) Excludes eating and drinking places

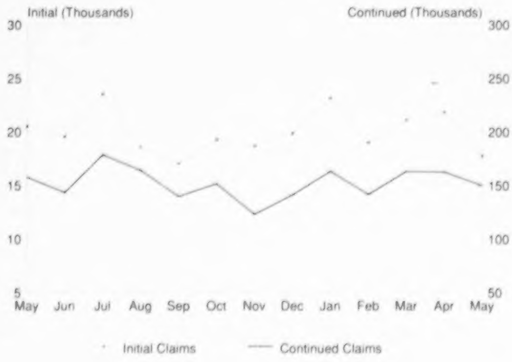
Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, May 1992*

ARIZONA LABOR MARKET INDICATORS

"Arizona Labor Market Indicators," a quick glimpse at data relevant to Arizona's job market, will appear most months in *Arizona Economic Trends*. Some of the data that had appeared each month in the *Arizona Labor Market Information Newsletter*, such as the U.S. and Phoenix-area consumer price indices, will appear at least once a quarter in *Arizona Economic Trends*. If you need this information more frequently, contact Research Administration at 542-3871.

Figure 1

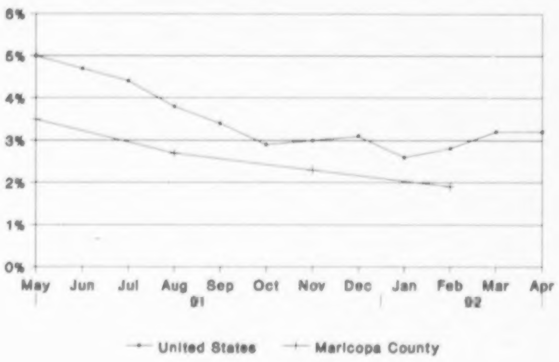
Arizona Continued and New Unemployment Insurance Claims, May 1991-May 1992



Source: *Arizona Dept. of Economic Security, Research Administration, June 1992*

Figure 2

Percentage Change in U.S. (Monthly) and Maricopa County (Quarterly) Consumer Price Indecies, May 1991-April 1992



Sources: *U.S. Dept. of Labor, Bureau of Labor Statistics, May 1992; and Arizona State University, Economic Outlook Center, April 1992*

JTPA Program Assists, Trains Out-of-Work

(continued from page 6)

As for Williams AFB, according to a plan developed earlier this year, Arizona's Title III program expects to serve about 1,500 workers (1,100 civilians) at Williams over the next two years, with the largest number of clients expected to enter the Title III program in October. About 1,000 of the Williams' employees entering the program are expected to be placed and at an average wage of $9 an hour, the plan says. About one-half in the program will receive training, with those with the lowest educational background receiving the highest priority.

For further information on JTPA, read Public Law 97-300 (S. 2036) and subsequent amendments, or contact Arizona's JTPA office for additional information at 602-542-3957.

—Brent Fine
Arizona Economic Trends Editor

Notes:

1. "Companies may slash 700,000 jobs this year," *USA Today*, Jan. 22, 1992, p. B1.
2. "Cooperative Labor-Management Worker Adjustment Programs," U.S. Department of Labor, Bureau of Labor-Management Relations and Cooperative Programs, 1989, p. 1.
3. "On the Edge of the 21st Century," DES Report Offers Snapshot of Arizona Labor Market by End of Decade," *Arizona Labor Market Information Newsletter*, Feb. 1992, pp 2-6.
4. "Plant closures: efforts to cushion the blow," Bennett Harrison, *Monthly Labor Review*, U.S. Dept. of Labor, Bureau of Labor Statistics, June 1984, pp. 41-43.
5. "Easing the worker's transition from job loss to employment," Ruth H. Fedrau, *Monthly Labor Review*, U.S. Dept. of Labor, Bureau of Labor Statistics, May 1984, pp. 38-40.
6. "Cooperative Labor-Management Worker Adjustment Programs," U.S. Department of Labor, Bureau of Labor-Management Relations and Cooperative Programs, 1989, p. 1.
7. "Study of the Implementation of the Economic Dislocation and Worker Adjustment Assistance Act," Executive Summary — Phase I Final Report, prepared by Social Policy Research Associates, Berkeley Planning Associates, and SRI International for U.S. Dept. of Labor, Employment and Training Administration, 1992, p. S-1.
8. Ibid, S-2.
9. "Plant Closing: Advance Notice and Rapid Response — Special Report," U.S. Congress, Office of Technology Assessment, September 1986, Appendix B: State and Local Advance Notice Programs, p. 2.
10. Public Law 97-300 (S. 2036), *U.S. Code — Administrative and Congressional News*, Vol 1., 1982.
11. "State defense jobs at risk," *The Arizona Republic*, April 24, 1982, C1. AET

Industry Update

"Industry Update" — featured each month as a service to our readers — is a compilation of public announcements and articles from newspapers and periodicals about business events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of industry news is not feasible. In addition, Arizona Economic Trends is not responsible for incorrect information reported by these sources.

Manufacturing

Hughes Aircraft Co. agreed in May to **purchase General Dynamics Corp.'s missile-production business** in San Diego, a move which could eventually lead to additional jobs at Hughes' Missile Systems Group in Tucson. General Dynamics' San Diego operation employs about 4,500 workers. The Arizona Legislature passed a bill in June offering tax incentives to defense businesses that expand operations in the state. The bill was designed to make it attractive for Hughes to consolidate its newly acquired San Diego operations in Tucson. Due to defense cutbacks, however, Hughes still plans to reduce its current Tucson workforce of 4,800 by about 1,000 this year.

The **Kingman Airport & Industrial Park** was chosen in May as the site for a **60,000-square-foot plant that will retread airplane tires** and refurbish aircraft wheels and brakes for a variety of commercial jets and military aircraft. Air Trends Inc., a subsidiary of Goodyear Tire & Rubber Co., expects to begin building the $5 million facility this summer and be operational by the first quarter of 1993. Air Trends says it will initially hire and train about 75 workers — and likely expand to 100 — with an annual payroll of about $1.4 million.

Three out-of-state manufacturing companies — two involving plastics — have **chosen sites in the West Valley** to locate part of their operations. Los Angeles-based **S.E. Rykoff**, which makes and distributes food products, plans to occupy by late summer a 160,000-square-foot building at 1640 S. 39th Ave. The number and type of type of jobs are not available. Meanwhile, **Frem Corp.** of Worchester, Mass., plans to build a 60,000- to 80,000-square-foot facility at 43rd Avenue and Buckeye Road that will make household plastic products, such as laundry baskets and storage crates. About 50 jobs are expected to be created by Frem. Finally, **Carlisle Plastics Inc.** of Boston was expected in May to lease 115,000 square feet at 84th Avenue and Washington Street in Tolleson for a distribution and manufacturing operation. Possibly up to 200 jobs would be created by Carlisle, which specializes in products such as trash bags, plastic hangers, and containers for water and milk.

Phoenix-based **Dial Corp. laid off 60 employees** in its information-systems department in late May. Dial, which employs about 1,000 people in the Valley, will contract out the work with Anderson Consulting of Chicago, which might hire some of the workers.

A designer of educational and entertainment software, **Reidel Software Productions, has moved its company headquarters** from Garden City, N.Y., to Tucson. Reidel, which licenses characters from film and television companies, makes software for a variety of personal-computer systems. No information on expected employment is available.

Construction

Two major developments in Tucson have moved a step closer to reality. **Foothills Resort Properties, Ltd.** has filed a compliance report with Pima County to **build a 400-room resort** and 18-hole golf course on 200 acres at the base of Pima County Canyon. The Stouffer Pima Canyon Resort is expected to produce **600 full-time jobs** and $3 million in tax revenue. Meanwhile, work on the **Rocking K Development** in the Rincon Valley is expected to get under way within two years after the Arizona Supreme Court ruled that a special election for zoning approval is not necessary. Plans call for the building of 10,000 homes and four golf courses, as well as commercial and office complexes.

A California developer completed a deal in May to **purchase 3,000 acres in northeast Scottsdale** for a community expected to have 3,500 to 4,000 homes and 10,000 residents by the year 2,000. The developer, **Newhall Land and Farming Co.**, plans to put in the infrastructure (e.g., utilities, roads), then sell parcels to builders in 1994 or '95. The project, worth more than $1 billion, will be located on land bounded on the north by Bell Road, on the south by Cactus and Thunderbird roads, on the east by the alignment of 124th Street, and on the west by the alignment of 100 Street.

Trade

The **Albertson's supermarket chain** has begun work on 687,000-square-foot **distribution center in Tolleson** at 99th Avenue and Van Buren Street. Scheduled to open in September 1993, the facility is expected to **employ 400** people with an annual payroll of $12 million and serve 36 stores in Arizona and New Mexico and possibly 15 stores in Las Vegas.

As part of a fast-tracked expansion process, **Buy the Yard Interiors Inc.** of Toronto announced plans to **open five to seven stores in Pheonix** with the first outlet expected to open in June. Buy the Yard, which plans to open 200 U.S. stores within three years, sells fabric and home-decorating materials.

Services

The **city of Peoria**, once a sleepy little town west of Phoenix, has awoken and is beginning to flex its muscles. By the middle of 1993, Peoria could have **five new General Motors dealerships** that employ between 250 and 500 workers and the city is in the process of luring at least one, but maybe two major league baseball teams by the 1994 Cactus League season. GM's real-estate division, Argonaut Realty of Thousand Oaks, Calif., signed an option in May to purchase 25 acres on Bell Road west of the Agua Fria Freeway (Loop 101). Zoning approval is expected by mid-summer with construction of the five dealerships expected to take six to nine months. Meanwhile, Peoria is currently trying to swing a deal to become the spring-training home for the Seattle Mariners and San Diego Padres. Seattle is currently looking for a new Cactus League home after leaving Tempe, while San Diego wants to move from Yuma to be closer with other teams based in the Valley.

Phoenix is one of several cities under consideration for a **4,000-employee, customer-service center for Discover Card**. A subsidiary of Sears Roebuck & Co., Discover Card Services Inc. already employs about 1,000 workers at its merchant-related services operation at Los Arcos Mall in Scottsdale. With a change in state's banking regulations in 1989, Arizona has lured several major credit-card operations with the largest, a Chase Manhattan Bank facility, expected to open this year in Tempe and eventually employ about 2,000 people.

Thirty new jobs, primarily part-time, are expected to be created when the **Mandarin Plaza Cinemas opens in Yuma** this fall. The four-screen project, at 3142 Arizona Ave., will only be Yuma's second movie complex, and will generate 200 construction jobs, all from the Yuma area.

When figures are in, the Arizona Motion Picture Development Office anticipates there was a **$10 million drop in money spent in the state on filmmaking** for fiscal year 1991-92, which ended June 30. About $41 million was spent in Arizona in fiscal year 1990-91. A slowdown in Hollywood filmmaking, due partly to less foreign investment, is blamed for the state's dropoff. And the recent cancellation of the television series *The Young Riders*, filmed at Old Tucson, may lead to a further drop in fiscal year '92-'93.

Finance, Insurance, and Real Estate

Bank of America Arizona plans to close 21 branches in the state, 16 in Maricopa County, beginning in August as part of its consolidations plans with the recent merger of Bank of America Corp. and Security Pacific Corp. The move follows the sale of 49 branches and their assets to Independent Bancorp, a bank owned by a group of California investors. Bank of America Arizona will have about 150 branches statewide when the latest closures are completed.

Transportation, Communications, and Public Utilities

MCI Telecommunications Corp. plans to add 400 positions to its national marketing operation in Phoenix and relocate to the Colonnade Mall at 20th Street and Camelback Road. MCI, which has a current workforce of 200 in Phoenix, will move by summer into a remodeled 60,000-square-foot facility that was formerly a Joske's department store.

As of early May, **Southwest Airlines was way ahead of schedule in its hiring plans** for 1992 for its Phoenix operations, having added 475 of an expected 600 new workers. The Dallas-based carrier is expected to have about 2,500 Valley employees by year end as it comes closer to opening a new maintenance facility at Sky Harbor Airport. Thirty of an estimated 200 workers initially needed for the maintenance facility had been hired as of early May.

Phoenix-based **Swift Transportation Co.**, with 1,850 tractors and 4,000 trailers, **continues to expand its operations** and see its revenues jump. Swift recently purchased Arthur H. Fulton Inc., giving Swift terminals in New York City and Richmond, Va., and has picked up several new major clients, including Anheuser-Busch, Miller Brewing Co., and Michelin Tire Corp. Swift employs 2,500 drivers and 600 other workers.

Government

The **U.S. Census Bureau opened a survey center in Tucson in May**, which will employ about 100 workers by the end of 1992 and will eventually employ 250 people. The 11,000-square-foot facility at 6363 S. Country Club will conduct surveys on subjects ranging from employment to crime and will use a 30 percent bilingual workforce to obtain more information on Hispanics. Pay for entry-level, full- and part-time workers will range from $6.77 to $7.45 an hour. AET

LMI PUBLICATIONS

The following revised publications, prepared by the Department of Economic Security, Research Administration, can be ordered by writing to the address on the back of this newsletter or by calling (602) 542-3871. One copy of each publication will be sent at no charge. Multiple copies are available at a nominal charge. DES offices can order directly from DES Supply.

1991 Wage Surveys

Research Administration conducted wage surveys for the entire state for the first time in 1991. Regional summaries include: Maricopa County (PAL-542); Pima County (PAL-543); Yuma, Pinal and Gila Counties combined (PAL-544); and Balance of State (PAL-545). A statewide summary (PAL-546) is also available.

Each survey includes a sample of employers with 20 or more employees from all industries. There were 203 occupations represented in the statewide summary.

Annual Planning Information

The *Annual Planning Information* (*API*) guide (PAL-327) for 1992-93 is expected to be available to the general public by mid-July. This publication covers a variety of demographic data. However, population tables related to economic data still do not reflect 1990 census adjustments. Economic tables from the 1990 census are expected to be distributed by the Bureau of the Census in mid- or late-July. Future issues of the *API* will be updated in odd calendar years.

Jobless Rate Fell Sharply in April

(continued from page 7)

the retail and wholesale sectors.

Unlike the southern part of the state, the approach of the summer tourist season accounted for strong gains in services and trade in the northern counties as a whole in April. Trade gained 800 jobs due to an increase of 500 jobs at eating and drinking establishments, while services increased by 200 as a result of a gain of 300 hotel jobs.

Arizona's FIRE group had moderate over-the-month employment growth for the month (200) with strong employment gains in the finance sector (350) being partially offset by losses in the real estate and insurance sectors.

Maricopa County had a similar situation in FIRE with a modest overall gain in FIRE thanks to 250 additional jobs in the finance sector offsetting losses in the real estate and insurance sectors. And throughout the state's non-metropolitan counties (all but Maricopa and Pima), jobs gains in the finance sector proved fairly strong as consumers and businesses took advantage of attractive lower interest rates.

Arizona's manufacturers continued to lose jobs in April, but at a diminishing rate over the last three months. Manufacturing lost 400 jobs, most of which, not surprisingly, occurred in the aircraft and missiles sector. Of these losses, almost 80 percent occurred in Maricopa County.

Manufacturing sectors in Maricopa County showing major employment gains were lumber and wood, fabricated metals, machinery, and chemicals. In Pima County, manufacturing employment remained unchanged with job gains occurring primarily in "aggregates" (e.g., stone, clay, and glass) and machinery, as well as other non-durable goods sectors. Statewide, apparel manufacturing suffered sizable job losses.

In summary, Arizona's employment picture in April continued to show signs of improvement with the significant decline in the unemployment rate an encouraging signal. The construction industry led the way with sizable job increases the past two months, while trade and services are still reflecting the impact of a slowed national economy on Arizona's tourism industry.

Meanwhile, manufacturing continues to show the effects of defense cutbacks, though since January the over-the-month rate of decline appears to be slowing as some manufacturing sectors continue to hold their own, particularly those connected with a rebounding housing market. AET

—Don Webbey,
RA Economist

ARIZONA ECONOMIC TRENDS

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The purpose of *Arizona Economic Trends* is to provide an update and analysis of state and county employment and economic data, as well as information on state and national programs and policies that affect the nation's and Arizona's labor markets. Included in this publication twice yearly are Research Administration's two-year projections of employment, unemployment, and labor force for Arizona and its major sub-state regions.

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State of Unions: Weaker in U.S., Arizona

A "Manufacturing Climate Study" conducted a few years ago by the consulting firm of Grant Thornton, Inc. showed that factory labor union members in Arizona made up a mere 3.7 percent of all Arizona 1989 manufacturing employees. That percentage ranked Arizona 48th among all states (see table 1), ahead of only South Carolina (3 percent) and South Dakota (2.7 percent).

And in a similar survey in 1984, Arizona ranked 47th, with 5.3 percent of its manufacturing workers unionized. The drop in Arizona's share of unionized manufacturing employees between 1984 and 1989 — and an overall 24 percent decline in members, from 9,200 to 6,900 — came despite total Arizona factory employment growth of 8.5 percent between those two years.

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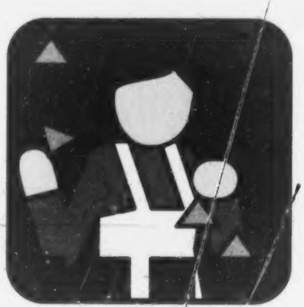


But the decline in the percentage and number of Arizona manufacturing workers in unions is just one manifestation of a national trend of declining union membership in manufacturing and all other major private sectors since union participation peaked in the mid-1950s.[1] Specifically in manufacturing, however, U.S. union membership declined almost 16 percent between 1984 and 1989, despite manufacturing employment staying about the same (see Table 2).[2]

On the other hand, Arizona's low ranking of union membership as a percentage of manufacturing employment is also a reflection of Arizona's history and of the state's legal and political environment for unions. As a "right to work" state, Arizona has been fallow ground for union organization.[3]

But given the trend of ever-decreasing unionism from an already low base, one might ask: Will Arizona private sector labor unions soon go the way of the dinosaurs, or will extinction be averted by some new resurgence of the need for labor to organize? In order to suggest answers to that and related questions, it is important to first review the benefits attributed to unions.

Union, High Wages Tied?

A principal benefit ascribed to unions has been that union wages tend to be higher than non-union wages.[4] And three U.S. Department of Labor surveys have repeatedly shown that there is a wage differential attributable to unions: 1) the Current Population Survey (CPS), 2) Industry Wage Survey, and 3) the Employment Cost Index.[5]

Economic textbooks acknowledge that the difference ranges from 10 to 25 percent and was as high as 20 to 30 percent in the 1970s.[6] Of course, there is considerable variation by industry, occupation, race and sex.[7]

While these same textbooks contend union wage premiums are real, they argue that they come at the expense of non-union workers and consumers. One cost to non-union workers is lower wages than would have been paid if employers didn't have to pay premium wages to union members. One cost to consumers is higher prices for products or services supplied with union labor.

In addition, economic textbooks argue that unions do not increase labor's overall share of total income.[8] Rather, increasing the total productivity of labor — through improved technology, better management, more capital, and increased worker skills — is the only way to raise real wages of all labor.[9]

The more genuine, if non-pecuniary, benefits of labor unions have come from instillment of a sense of empowerment and establishment of on-the-job due-process for workers. Without the system of industrial jurisprudence that has evolved in large part from union efforts, workers would otherwise believe that the status and character of their employment existed solely at the whim of management, one economist says.[10]

In fact, there are many characteristics of employment most workers enjoy today, at least in part, because of the historical efforts of unions. Examples include eight-hour work days,[11] workmans' compensation for injury on the job, unemployment insurance, paid vacations, paid holidays, and employer-paid health insurance.

Counter Trends in Public Sector

While U.S factories have become less and less unionized, state and local government unions have been growing at rates about equal to government employment growth. According to the 1982 and 1987 *Census of Governments*, state and local government union membership and state and local government employment grew at similar rates between those two years — 8.7 percent and 7.8 percent, respectively (see Table 3).[12] And in Arizona during that five-year period, state and local government employment grew 15.1 percent (ranking second nationally), while government union membership grew 15.2 percent (ranking 10th).

Meanwhile, the share of Arizona state and local government workers in unions remained constant, at 23 percent, between 1982 and 1987, as did the state's ranking among all states, at 35th. The national average for the share of state and local government employers in unions also held steady during those two years, at a higher level of 37 percent (see Table 4).

So why is union appeal waning in the private sector, but holding steady at a significantly higher share in the public sector? In the words of David Mendoza, spokesman for the Arizona affiliate of the American Federation of State, County and Municipal Employees (AFSCME), public unions got a late start relative to the private sector and are only now catching up.

> ***Thomas Karier of Eastern Washington University contends unions are not a significant factor in a country's ability to be competitive. Karier points out that the United States has among the lowest unionization rates overall in the world today.***

Richard Kearney supports that view in his book, "Labor Relations in the Public Sector." Kearney says there were three principal factors inhibiting public employee unionism and collective bargaining prior to the 1960s: ideology, the nature of government employment (predominantly white-collar jobs) and an unfavorable legal environment.[13]

Since the 1960s, the legal environment has changed with the most significant legal change being President John Kennedy's Executive Order 10988 of 1962. That order guaranteed rights of federal employees to unionize and bargain collectively.[14] Another contributing factor was the "one man, one vote" judgments of the U.S. Supreme Court that wrested control of the Congress and state legislatures from less pro-union rural interests.[15, 16]

The desire for empowerment may be another reason for continuing appeal in the public sector. State and local government employees' benefits and working conditions are under the control of state legislatures, city councils, boards of county supervisors, and school district boards. Most of these are elective offices having little direct contact with most of the governing body's employees.

Says one government employee union member (who wishes to remain anonymous) when speaking of his reasons for joining AFSCME: "I just want to be sure there is someone representing my interests before the state Legislature and that legislators do not hear only from big utilities, large corporations, and the chambers of commerce."

Governments have historically used the doctrine of "sovereignty" to inhibit the formation of public unions and to prohibit collective bargaining.[17] The doctrine of sovereignty holds that the process of collective bargaining impinges on elected officials' ability to represent the will of the people. Legal and academic critics, however, have argued that the sovereignty doctrine doesn't hold water in its application to public unions, because American governments have been delegating aspects of the peoples' sovereignty through contracts with private-sector entities and by other means for more than 200 years.[18]

In Arizona, a bill before the most recent session of the state Legislature (SB 1384) would have enabled state employees to bargain collectively. The bill passed the Senate along party lines (Democrats for, Republicans against), but died in the Government Relations Committee of the House.

Mendoza says the right to bargain collectively implies the right to settle impasses between labor and management by either strikes or binding arbitration. Mendoza notes that a bill similar to the one in the Arizona legislature became law last year in New Mexico. Government labor impasses in New Mexico are now settled by binding arbitration, he says. New Mexico, however, is not a "right-to-work" state, and has more of a pro-union history.

Table 1

Manufacturing Employment and Manufacturing Unionized Employment, in Selected States, 1984 and 1989

(In Thousands)

State	Manufacturing Union Employment 1984	Manufacturing Union Employment 1989	Rank by Union Employees 1984	Rank by Union Employees 1989	Percentage of Manufacturing Unionized 1984	Percentage of Manufacturing Unionized 1989	Rank by Percent Unionized 1984	Rank by Percent Unionized 1989
Michigan	480.9	499.5	3	2	50.7%	51.7%	1	1
New York	672.1	559.7	1	1	50.4	47.2	2	2
Hawaii	9.7	8.9	39	37	44.1	41.4	3	3
Ohio	468.8	446.4	4	4	41.6	39.8	4	4
Pennsylvania	457.2	412.7	5	5	40.7	39.3	7	5
California	508.7	483.4	2	3	24.7	22.4	20	16
Colorado	21.1	18.5	32	33	10.9	9.6	40	37
New Mexico	5.6	4.0	44	44	15.3	9.4	31	38
Nevada[1]	1.6	1.4	48	48	7.6	5.4	45	45
Utah[1]	6.7	4.6	42	42	7.2	4.5	46	47
Arizona[1]	**9.2**	**6.9**	**40**	**40**	**5.3**	**3.7**	**47**	**48**

Note: 1) Right-to-work state

Source: *Census of Manufacturers*, U.S. Dept. of Commerce, Bureau of Census, 1986, 1991

Recent Historical Precedents

While unions have continually had to face challenges to their demands for work-related improvements by management, government, the legal structure of society and, perhaps more significantly, the free market, recent historical events have been battering unions to the point of peril.

Nearly a decade ago, President Reagan began the onslaught by firing 13,000 striking federal aircraft controllers. Most of these strikers were later replaced by non-union employees.

In Arizona, the early 1980s brought a significant challenge to unions of copper-mining employees. Just as copper mining was on the brink of new technological advancements in extraction methods,[19] there was a strike by workers of the Phelps Dodge mine in Morenci. A fear of potential violence between copper workers and company officials, as well as fear for public safety, prompted then-Gov. Bruce Babbitt to send in units of the Arizona National Guard and Arizona Department of Public Safety to keep order.

Phelps Dodge was able to bring in replacement workers and continue operations at a reduced level, and later hold an election among remaining copper mining workers that disenfranchised the union. In fact, 13 separate unions were voted out.[20] Within two years of that strike, employment in copper mines throughout Arizona was reduced by half from about 24,000 workers to less than 12,000.

While it was then low market demand for copper, and later the technological advance of metals extraction by improved processes, that led to the majority of copper mining layoffs, Arizona copper unions have not since enjoyed the same power and effectiveness they were able to exercise before the Morenci strike.

Holsum Bakery Dispute

More recently, Holsum Bakery workers in Phoenix walked off the job in June 1991 after reaching an impasse with the company regarding the firm's plan to replace their union-controlled pension system with a company-administered program.[21] By October 1991, when the union finally gave in to company terms, the bakery was operating with replacement workers. Some union members were hired back, but many were not.

According to William Van Dine, business agent for the Bakers Union Local 232, the union is suing Holsum Bakery for unfair labor practices. Up to now, there have been a number of hearings on the issue by the National

Table 2

Growth Rates of Manufacturing Employment and Manufacturing Unionized Employment, in Selected States, 1984-1989

	Mfg. Emp. Growth Rate	Rank	Mfg. Unionized Emp. Growth Rate	Rank
Florida[1]	7.1%	16	12.1%	1
Virginia[1]	1.2	31	7.4	2
Michigan	1.9	30	3.9	3
Deleware	2.9	27	1.9	4
Mississippi[1]	11.1	7	-0.4	5
California	4.8	22	-5.0	8
Colorado	-0.6	33	-12.4	20
Nevada[1]	20.4	3	-14.5	25
Arizona[1]	**8.5**	**13**	**-24.2**	**39**
New Mexico	17.0	4	-28.1	42
Utah[1]	9.6	11	-31.5	47

Note: 1) Right-to-work state

Source: *Census of Manufacturers,* *U.S. Dept. of Commerce, Bureau of Census, 1986, 1991*

Labor Relations Board and the courts, but no judgments rendered.

Van Dine says many of the workers preferred to lose their jobs, rather than give in on the pension issue. And as of mid-June, there were 143 former Holsum Bakery employees still paying union dues, Van Dine says; some have new jobs, and some are still unemployed.

Van Dine says the company has already conducted a poll of present employees to determine if they wish to be represented by the union. Bob Hans, Holsum Bakery's human resources manager, confirms that a poll was taken in December. The poll indicated that the employees did not wish to have the union represent them, he says. Nevertheless there has not been any officially supervised union certification election by the National Labor Relations Board, because hearings about the strike are still going on before the NLRB.

Hans also points out that there are still two other unions representing some Holsum Bakery employees. These include the machinists' union, and the Teamsters Union. Neither of these unions participated in the bakers' union strike or were affected by events that followed, he says.

Replacing Striking Workers

Currently, an employer can legally bring in permanent replacements when workers strike over economic issues, rather than unfair labor practices.[22] A bill introduced this year in the U.S. Senate (SB 55), however, proposed to change the law to prohibit permanent replacement of strikers (for any reason), although a similar bill last year was passed by both houses of Congress, then successfully vetoed by the President. This year, the bill didn't make it out of the Senate, but the issue has become a part of the presidential election rhetoric. President Bush still opposes the bill, but Democratic candidate Gov. Bill Clinton supports it.[23]

One recent strike attracting national attention occurred at the Caterpillar Inc. plant in Peoria, Ill., which makes heavy construction equipment. When contracts were up for renegotiation at Caterpillar in December 1991, members of the United Auto Workers (UAW) union hoped to duplicate terms of a recent contract between Deere & Co. and its UAW union workers.

Donald Fites, Caterpillar's new CEO, however, offered a less-lucrative deal than Deere employees received, so the union went on strike.[24] After the third offer from the company was rejected by the union, Fites dug in his heels. He threatened replacement of all strikers who did not come back to work under the terms of his last offer and backed the threat by placing want ads in local papers.[25] Within 10 days, the union capitulated and ended the strike.[26]

Two bargaining tactics were central to this event. UAW workers practiced a tactic called "pattern bargaining," in linking their demands with those of UAW workers at Deere & Co.[27] Caterpillar used the threat of permanent replacement of union workers who did not return under its terms. The resolution of the Caterpillar strike may well have shown that threat of permanent replacement, at least for now, is a more powerful tactic than pattern bargaining.

Part of the strategy of pattern bargaining, which had been successfully used in the auto industry for three decades, is to target key firms that have the most to lose from a strike. For example, the UAW might select a Chrysler plant for a strike, because sales of that plant's products are high and continuing production is critical. Because of the potential economic loss to Chrysler, the company accedes to the union demands. The UAW then uses that settlement as precedent in negotiations at plants of other U.S. auto makers, even when their

Table 3

State and Local Government Employment and State and Local Government Unionized Employment, in Selected States, 1982 and 1987

(In Thousands)

State	State and Local Govt. Employment		State and Local Govt. Unionized Employment		Employment Growth Rates 1982-1987		Rank by Growth Rates	
	1982	1987	1982	1987	Total	Unionized	Total	Unionized
South Carolina[1]	175.9	202.2	16.0	26.2	15.0%	63.7%	3	1
North Dakota[1]	49.3	54.0	9.8	14.0	9.5	42.9	26	2
Florida[1]	533.5	596.7	144.4	205.3	11.8	42.2	12	3
New Hampshire	51.4	56.8	18.2	23.0	10.5	26.4	21	4
Nevada[1]	49.8	55.3	18.5	22.2	11.0	20.0	17	5
Arizona[1]	**167.4**	**192.6**	**38.9**	**44.8**	**15.1**	**15.2**	**2**	**10**
California	1,395.9	1,532.1	591.6	668.8	9.8	13.0	25	15
New Mexico	91.0	103.2	17.1	19.1	13.4	11.7	7	20
Utah	89.0	100.2	33.8	34.3	12.6	1.5	9	37
Colorado	187.4	210.9	54.4	54.9	12.5	0.9	10	40

Note: 1) Right-to-work state

Source: *Census of Governments*, U. S. Dept. of Commerce, Bureau of Census 1988, 1991

products are not in exceptionally high demand.

Also at issue in the Caterpillar negotiations were elements that potentially pit younger workers against older workers. One of the Caterpillar proposals was to pay less to new hires at parts-distribution centers than older workers in the same jobs. The union demand was to have the same wage scales for all union members.[28]

The company proposal, if made effective, would have weakened solidarity of the union. In addition, there were plenty of high school graduates in Peoria who were more than willing to cross the union picket lines to accept jobs with Caterpillar at half the union wage rate.[29] And since the terms of Caterpillar's last offer were essentially those adopted, it appears the two-tiered pay system was established.

Unions' Future Seems Unclear

Final resolution of the Caterpillar strike and other present trends suggest harder times ahead for unions. Without legislation to quell the power of permanent replacement of strikers, more and more firms will likely use the strategy to weaken unions' influence. Even the "threat" of permanent replacement of striking union workers is a strong deterrent against the use of strikes. And U.S. Department of Labor data indeed confirm that strikes have been dwindling in number over the years (see Table 5).[30]

Many would argue that fewer strikes are good for both workers and employers, since both sides lose money during strike periods. Some even argue that higher union wages do not make up for the costs of past strikes by unions.

For example, suppose a workforce of 500 earning the current average gross wage for Arizona manufacturing workers, $450 a week, strikes to win a 5 percent wage increase. If the strike lasts 10 weeks, each worker has lost $4,500 of pay.

The 5 percent increase will provide each employee an additional $22.50 per week, or $1,170 a year. Therefore, even if the company capitulates to the full 5 percent, it would take a worker almost four years to recover the lost wages (not including other wage raises during that four-year period or money received from the union during the strike).

One cannot overlook the fact, however, that many improvements in employees' working conditions have been won by strikes. While "enlightened" employers may offer additional gains to workers in exchange for improved productivity, the market place is a hard task master.

Always lurking in the background is the potential for employers to compete at the cost of worker well-being. Lower wages, after all, may make it easier for a firm to sell its products at

Table 4

State and Local Goverment Unionized Employment, Ranked by Share of Total State and Local Government Employment, in Selected States, 1982 and 1987

	1982	Rank	1987	Rank
Hawaii	70.0%	2	69.5%	1
New York	78.5	1	66.1	2
Connecticut	66.7	4	64.6	3
Massachusetts	68.8	3	63.9	4
New Jersey	56.3	7	58.3	5
California	42.4	16	43.7	15
Nevada	37.2	19	40.1	19
Utah[1]	38.0	18	34.2	23
Colorado	29.0	27	26.0	29
Arizona[1]	**23.2**	**35**	**23.3**	**35**
New Mexico	18.7	43	18.5	42

Note: 1) Right-to-work state

Source: *Census of Governments,* U.S. Dept. of Commerce, Bureau of Census, 1988, 1991

lower prices and thus be better able to compete in the marketplace.

But lower wages are a cost to workers that lowers their living standards. While union members cannot expect to be protected from the risks of the market any more than employers can, they can work to insure that employers act responsibly.

Unions and World Competition

It is easy to argue that higher wages and better working conditions add to the cost of products, making them less competitive with those of other countries.

Thomas Karier of Eastern Washington University contends unions are not a significant factor in a country's ability to be competitive. Karier points out that the United States has among the lowest unionization rates overall in the world today. He argues further that Japan, Canada, and Germany (formerly West Germany) together account for most of the U.S. trade deficit and have higher unionization rates and stronger unions than in the United States.[31]

Karier's argument is disputed by Fariborz Ghadar of George Washington University. Ghadar argues that Karier's reasoning is too simplistic and overlooks the fact that industries where the United States is most competitive include biotechnology, aircraft, and computers. These industries, he contends, are the least unionized.[32]

There is probably some merit to both arguments. But even if the most competitive U.S. products are from industries in which unions are less strong, U.S. workers may reject the idea that the only way to compete in a global economy is to give up many of the benefits unions have won.

U.S. workers are not likely to easily accept the loss of hard-fought benefits and worker protections, such as fully or partly paid health insurance and grievance procedures. That's because strongly unionized countries like Germany and Japan have shown that companies producing products of high quality can compete nearly anywhere in the world and provide high wages, good benefits, and humane working conditions.

Unions and Economic Development

Economic-development officials often consider areas of low unionization an enticement for companies wanting to relocate. Indeed, as an institution that has met with many firms considering relocation to Arizona, DES, Research Administration can affirm that unionization is a top concern of executives searching for a new location. Questions about local union strength are probably second only to questions about labor costs.

Given the statistics of low manufacturing unionization rates cited earlier in this article, Arizona should then be able to outperform all but a handful of other states in attracting new manufacturing firms. There is some support for this hypothesis in the tables ranking states by manufacturing job growth and manufacturing union growth.

Between 1984 and 1989, while Arizona ranked high (13th) in total manufacturing employment growth, it ranked fairly low (39th) in factory union growth. Michigan, on the other hand, ranked low (30th) in manufacturing job growth, but very high (third) in factory union growth (one of only four states where union growth was positive).

Yet, if the hypothesis, "low unionization attracts industry" is true, why does Arizona rank very low (41st as of February 1992) among states in percentage of manufacturing employment and even lower (48th) in percentage of manufacturing union membership? On the opposite end, Michigan ranks highest in percentage of factory union membership, and also high (7th) in manufacturing as a percent of total payroll employment.

Perhaps historical patterns, rather than present union concentration relationships explain the paradox. Michigan, after all, began its automobile manufacturing growth in

(continued on page 15)

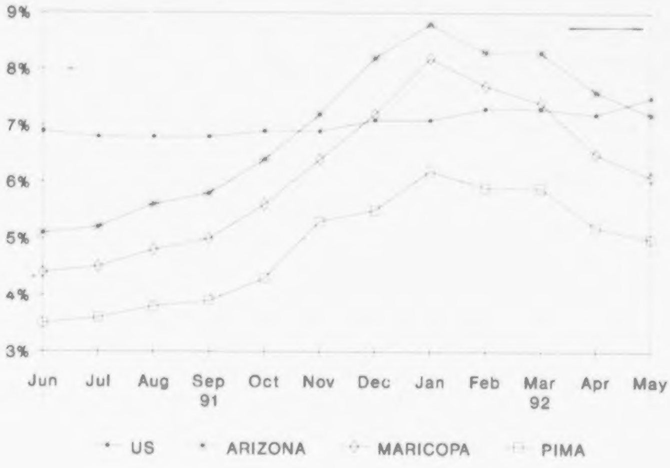
State Jobless Rate Dipped Below U.S. Average in May

ARIZONA'S WORKFORCE

Arizona's seasonally adjusted unemployment rate declined four-tenths of one percent to 7.2 percent in May, while the national rate increased three-tenths of a percent to 7.5 percent. This was the first time since October 1991 that Arizona's jobless rate was below the national rate. Meanwhile, the corresponding rate was down for all of Arizona's counties, except Greenlee, where the rate increased nine-tenths of one percent to 9.7 percent. The seasonally adjusted unemployment rates ranged from a high of 21.7 percent in Yuma County to a low of 5 percent in Pima County.

Figure 1

U.S., Arizona, Maricopa County, and Pima County Unemployment Rates (Seasonally Adjusted), June 1991-May 1992



Source: Arizona Dept. of Economic Security, Research Administration, June 1992

The state's total employment decreased by 14,600 in May, due in part to fewer multiple jobholders and a decrease in the number of self-employed. The number of unemployed in Arizona also declined in May, by 8,200, which follows April's decline of 16,500. Correspondingly, there were fewer unemployment insurance claims filed in May and a decline in the number of people moving into Arizona seeking employment.

Arizona's non-farm wage and salary employment declined in May by 3,200, which follows April's revised figures showing an increase of 1,100. Over-the-year, non-farm wage and salary employment increased by a modest 3,000 jobs.

Statewide, major industry groups posting over-the-month payroll employment gains were manufacturing, mining, and construction. Employment losses, on the other hand, occurred in transportation, communications, and public utilities (TCPU); trade; services; and government. FIRE remained unchanged over-the-month.

Arizona's manufacturing industry managed to show its first over-the-month employment gain in eight months, albeit a weak one, by adding 100 jobs in May. Although the durable-goods group showed no change in May from April's level, this represents the first time in 18-straight months that the durable-goods group did not show an over-the-year employment loss.

Non-durable goods employment gained 100 jobs, with increases in the printing, paper, and plastics sectors. And gains in the chemicals sectors managed to offset much of the losses in the apparel and food sectors.

Within the combined durable and non-durable-goods group, the only sector experiencing job losses in May was aircraft and missiles, which lost 500. For the month, all of Arizona's manufacturing subindustries experienced average growth, except for aircraft and missiles. In Maricopa County, manufacturing employment declined by 200 in May, primarily due to the loss of 200 jobs in durable goods. Manufacturing in Pima County gained 100 jobs for the month.

For the state as a whole, construction employment increased by 800 in May. Although the monthly gains were weaker than increases the prior two months, all three subindustry sectors (heavy and general construction, and special trades) experienced employment growth. Once again, special trades led the way. Through May 1992, Arizona's construction industry as a whole averaged over-the-year employment growth of 1.5 percent.

In Maricopa County, construction employment increased by 500 with most of the gain in special trades. Employment in heavy construction was down slightly, while general construction employment showed fairly strong gains in May. Pima County construction grew by 100 jobs in May.

Trade Continues Weakness

For the month, Arizona's trade industry employment declined by 1,100 (900 in retail trade), the fifth-consecutive, over-the-month decline. That brought over-the-year job losses to 1,700, the largest over-the-year decline in trade since February 1983.

The largest job losses in retail trade occurred in food stores, which lost 500, while the largest gain (100) was

(continued on page 13)

Table 1

Arizona Labor Force, Employment, and Unemployment Data, May 1992[a]

(In Thousands)

				Monthly/Yearly Change	
	May 1992[b]	Apr. 1992[c]	May 1991	Apr. '92 - May '92	May '91 - May '92
Total Civilian Labor Force[d]	1715.8	1738.6	1717.0	-22.8	-1.2
Total Unemployment	120.5	128.7	82.6	-8.2	37.9
Unemployment Rate	7.0%	7.4%	4.8%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	7.2%	7.6%	5.0%	—	—
Total Employment	1595.3	1609.9	1634.4	-14.6	-39.1
Total Wage and Salary Employment[f,g]	1507.5	1510.6	1504.4	-3.1	3.1
Private Sector	1222.3	1224.5	1224.9	-2.2	-2.6
Government	285.2	286.1	279.5	-0.9	5.7
Goods-Producing Industries	262.3	261.3	266.5	1.0	-4.2
Manufacturing	168.2	168.1	176.2	0.1	-8.0
Total Durable Goods	124.6	124.6	132.8	0.0	-8.2
Stone, Clay, and Glass	5.3	5.2	5.6	0.1	-0.3
Primary and Fabricated Metals	13.6	13.5	14.2	0.1	-0.6
Primary Metals	5.6	5.6	6.0	0.0	-0.4
Fabricated Metals	8.0	7.9	8.2	0.1	-0.2
Machinery	52.8	52.7	54.8	0.1	-2.0
Aircraft and Missiles	22.4	22.9	27.5	-0.5	-5.1
Lumber and Wood Products (Excluding Furniture)	6.6	6.4	6.3	0.2	0.3
Total Non-durable Goods	43.6	43.5	43.4	0.1	0.2
Food and Kindred Products	10.0	10.0	9.5	0.0	0.5
Printing and Publishing	15.6	15.5	15.7	0.1	-0.1
Mining and Quarrying	14.3	14.2	13.4	0.1	0.9
Copper Mining	12.0	11.8	11.0	0.2	1.0
Construction	79.8	79.0	76.9	0.8	2.9
Service-Producing Industries	1245.2	1249.3	1237.9	-4.1	7.3
Transportation, Communications, and Public Utilities	78.8	79.7	81.0	-0.9	-2.2
Transportation	45.0	45.2	46.9	-0.2	-1.9
Communications and Public Utilities	33.8	34.5	34.1	-0.7	-0.3
Trade	371.9	372.9	373.5	-1.0	-1.6
Total Wholesale Trade	75.0	75.1	74.7	-0.1	0.3
Total Retail Trade	296.9	297.8	298.8	-0.9	-1.9
General Merchandise and Apparel	49.0	49.1	47.9	-0.1	1.1
Food Stores	49.9	50.4	50.1	-0.5	-0.2
Automotive and Service Stations	34.7	34.6	34.0	0.1	0.7
Eating and Drinking Places	105.3	105.4	107.6	-0.1	-2.3
Finance, Insurance, and Real Estate	91.8	91.8	93.2	0.0	-1.4
Services and Miscellaneous	417.5	418.8	410.7	-1.3	6.8
Hotels and Lodging Places	40.1	40.5	41.3	-0.4	-1.2
Business Services	86.8	86.6	84.2	0.2	2.6
Health Services	108.4	108.2	104.1	0.2	4.3
Government	285.2	286.1	279.5	-0.9	5.7
Federal	45.7	45.3	45.8	0.4	-0.1

Notes and Source: See Table 3

Table 2

Maricopa County Labor Force, Employment, and Unemployment Data, May 1992(a)

(In Thousands)

				Monthly/Yearly Change	
	May 1992(b)	Apr. 1992(c)	May 1991	Apr. '92 - May '92	May '91 - May '92
Total Civilian Labor Force(d)	1050.2	1060.5	1066.9	-10.3	-16.7
Total Unemployment	62.8	67.7	43.5	-4.9	19.3
Unemployment Rate	6.0%	6.4%	4.1%	—	—
Unemployment Rate (Seasonally Adjusted)(e)	6.1%	6.5%	4.2%	—	—
Total Employment	987.4	992.8	1023.4	-5.4	-36.0
Total Wage and Salary Employment(f,g)	981.8	983.2	987.1	-1.4	-5.3
Private Sector	757.5	759.5	770.8	-2.0	-13.3
Government	147.2	146.6	144.0	0.6	3.2
Goods-Producing Industries	402.1	403.5	415.6	-1.4	-13.5
Manufacturing	125.4	125.6	132.2	-0.2	-6.8
Total Durable Goods	94.4	94.6	101.1	-0.2	-6.7
Stone, Clay, and Glass	3.0	2.9	3.2	0.1	-0.2
Primary and Fabricated Metals	9.3	9.3	9.8	0.0	-0.5
Machinery	43.9	43.9	45.6	0.0	-1.7
Total Non-durable Goods	31.0	31.0	31.1	0.0	-0.1
Food and Kindred Products	7.1	7.2	6.9	-0.1	0.2
Printing and Publishing	11.0	10.9	11.2	0.1	-0.2
Mining and Quarrying	0.8	0.7	0.8	0.1	0.0
Construction	52.9	52.4	50.3	0.5	2.6
Service-Producing Industries	802.7	804.5	803.8	-1.8	-1.1
Transportation, Communications, and Public Utilities	55.0	55.3	57.9	-0.3	-2.9
Transportation	32.9	33.1	35.4	-0.2	-2.5
Communications and Public Utilities	22.1	22.2	22.5	-0.1	-0.4
Trade	243.8	244.8	248.0	-1.0	-4.2
Total Wholesale Trade	56.9	56.8	57.8	0.1	-0.9
Total Retail Trade	186.9	188.0	190.2	-1.1	-3.3
General Merchandise and Apparel	30.9	31.1	30.6	-0.2	0.3
Food Stores	31.5	31.9	32.3	-0.4	-0.8
Automotive and Service Stations	21.3	21.4	21.0	-0.1	0.3
Eating and Drinking Places	67.1	67.5	68.8	-0.4	-1.7
Finance, Insurance, and Real Estate	73.2	73.2	74.3	0.0	-1.1
Services and Miscellaneous	283.5	284.6	279.6	-1.1	3.9
Hotels and Lodging Places	24.0	24.6	24.7	-0.6	-0.7
Business Services	70.4	70.2	68.2	0.2	2.2
Health Services	70.4	70.0	67.3	0.4	3.1
Government	147.2	146.6	144.0	0.6	3.2

Notes and Source: See Table 3

Table 3

Pima County Labor Force, Employment, and Unemployment Data, May 1992[a]

(In Thousands)

				Monthly/Yearly Change	
	May 1992[b]	Apr. 1992[c]	May 1991	Apr. '92 - May '92	May '91 - May '92
Total Civilian Labor Force[d]	322.6	325.2	313.7	-2.6	8.9
Total Unemployment	15.3	16.5	10.0	-1.2	5.3
Unemployment Rate	4.7%	5.1%	3.2%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	5.0%	5.2%	3.4%	—	—
Total Employment	307.3	308.7	303.7	-1.4	3.6
Total Wage and Salary Employment[f,g]	268.2	267.5	261.8	0.7	6.4
Private Sector	203.7	203.3	199.5	0.4	4.2
Government	64.5	64.2	62.3	0.3	2.2
Goods-Producing Industries	41.3	41.1	41.1	0.2	0.2
Manufacturing	24.0	23.9	24.8	0.1	-0.8
Total Durable Goods	18.6	18.6	19.7	0.0	-1.1
Total Non-durable Goods	5.4	5.3	5.1	0.1	0.3
Mining and Quarrying	2.3	2.3	2.3	0.0	0.0
Construction	15.0	14.9	14.0	0.1	1.0
Service-Producing Industries	226.9	226.4	220.7	0.5	6.2
Transportation, Communications, and Public Utilities	10.6	10.6	9.7	0.0	0.9
Transportation	6.0	6.0	5.3	0.0	0.7
Communications and Public Utilities	4.6	4.6	4.4	0.0	0.2
Trade	63.0	62.7	61.6	0.3	1.4
Total Wholesale Trade	9.2	9.2	8.8	0.0	0.4
Total Retail Trade	53.8	53.5	52.8	0.3	1.0
General Merchandise and Apparel	7.9	7.9	7.7	0.0	0.2
Food Stores	8.2	8.3	8.1	-0.1	0.1
Automotive and Service Stations	5.7	5.6	5.5	0.1	0.2
Eating and Drinking Places	19.4	19.3	19.3	0.1	0.1
Finance, Insurance, and Real Estate	11.8	11.7	11.6	0.1	0.2
Services and Miscellaneous	77.0	77.2	75.5	-0.2	1.5
Hotels and Lodging Places	6.8	7.0	6.8	-0.2	0.0
Business Services	12.2	12.3	11.7	-0.1	0.5
Health Services	23.1	23.1	22.5	0.0	0.6
Government	64.5	64.2	62.3	0.3	2.2

Notes:
- a) Data on labor force, total unemployment, total employment, and seasonally adjusted unemployment rate should not be used for economic-assistance programs. Data for economic-assistance programs are available by contacting DES, Research Administration
- b) Preliminary and subject to revision following month
- c) Revised
- d) Adjusted to Current Population Survey (CPS) to reflect place of residence
- e) Normal seasonal variations have been eliminated to reflect underlying trends
- f) By place of work; does not include agricultural workers, self-employed, unpaid family members, and domestic workers
- g) Detail may not add up correctly due to rounding
- h) Rounded to the nearest one-quarter

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, June 1992*

Table 4

Non-metropolitan Counties' Labor Force, Employment, and Unemployment Data, May 1992[a,b]

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz
Total Civilian Labor Force[d]	15,125	36,650	42,950	13,900	8,350	3,425	7,275
Total Unemployment	2,025	2,975	3,750	1,525	775	325	600
Unemployment Rate	13.4%	8.1%	8.7%	11.0%	9.1%	9.7%	8.3%
Unemployment Rate (Seasonally Adjusted)[e]	15.1%	8.4%	9.6%	12.3%	9.5%	9.7%	10.2%
Total Employment	13,100	33,675	39,200	12,375	7,575	3,100	6,675
Total Wage and Salary Employment[f,h]	15,425	27,150	40,775	12,250	5,275	3,425	3,525
Private Sector	9,575	15,325	29,425	9,125	3,100	2,850	2,525
Government	5,850	11,825	11,350	3,125	2,175	575	1,000
Goods-Producing Industries	775	2,225	4,750	3,375	400	2,300	550
Manufacturing	500	1,175	3,100	1,425	200	25	225
Mining and Quarrying	25	125	150	1,175	0	2,025	50
Construction	250	925	1,500	775	200	250	275
Service-Producing Industries	14,650	24,925	36,025	8,875	4,875	1,125	2,975
Transportation, Communications, and Public Utilities	1,675	1,500	2,500	450	175	50	150
Trade	1,700	5,700	10,625	2,700	1,500	325	1,200
Finance, Insurance, and Real Estate	400	625	700	225	125	25	125
Services and Miscellaneous	5,025	5,275	10,850	2,375	900	150	500
Government	5,850	11,825	11,350	3,125	2,175	575	1,000

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
Total Civilian Labor Force[d]	38,800	27,125	38,950	11,925	40,775	57,750
Total Unemployment	3,275	2,950	3,775	1,575	2,825	16,050
Unemployment Rate	8.4%	10.8%	9.7%	13.3%	6.9%	27.8%
Unemployment Rate (Seasonally Adjusted)[e]	9.2%	13.3%	9.9%	16.7%	7.5%	21.7%
Total Employment	35,525	24,175	35,175	10,350	37,950	41,700
Total Wage and Salary Employment[f,h]	27,800	21,350	31,000	11,400	28,500	29,775
Private Sector	22,625	14,575	21,100	9,475	23,150	21,350
Government	5,175	6,775	9,900	1,925	5,350	8,425
Goods-Producing Industries	5,175	3,475	9,125	1,300	5,575	3,025
Manufacturing	2,575	1,600	2,900	1,000	2,525	1,675
Mining and Quarrying	50	1,075	5,500	0	1,025	0
Construction	2,550	800	725	300	2,025	1,350
Service-Producing Industries	22,625	17,875	21,875	10,100	22,925	26,750
Transportation, Communications, and Public Utilities	1,375	1,475	875	725	1,025	1,300
Trade	8,575	4,475	5,600	5,325	8,150	9,150
Finance, Insurance, and Real Estate	1,225	525	600	275	1,000	1,025
Services and Miscellaneous	6,275	4,625	4,900	1,850	7,400	6,850
Government	5,175	6,775	9,900	1,925	5,350	8,425

Notes and Source: See Table 3

Table 5

Estimated Hours and Earnings of Production Workers, by Selected Industry Groups, May 1992[a]

Arizona

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	**May 1992[b]**	**Apr. 1992[c]**	**May 1991**	**May 1992[b]**	**Apr. 1992[c]**	**May 1991**	**May 1992[b]**	**Apr. 1992[c]**	**May 1991**
Manufacturing	$447.17	$443.07	$423.86	40.8	40.5	40.1	$10.96	$10.94	$10.57
Aircraft and Missiles	662.40	658.74	648.60	45.0	44.6	44.7	14.72	14.77	14.51
Food and Kindred Products	366.05	356.46	353.07	38.9	39.0	39.1	9.41	9.14	9.03
Primary Metals	517.88	488.00	500.35	41.2	40.0	38.4	12.57	12.20	13.03
Machinery	458.49	463.90	416.47	40.9	40.8	40.2	11.21	11.37	10.36
Copper Mining	633.82	654.75	645.65	43.0	44.3	43.9	14.74	14.78	14.73
Construction	459.16	454.10	438.00	38.2	38.0	36.9	12.02	11.95	11.87
Public Utilities	787.95	788.40	752.12	42.5	43.8	43.4	18.54	18.00	17.33
Retail Trade[d]	285.69	281.42	265.51	32.8	32.8	32.3	8.71	8.58	8.22
Wholesale Trade	398.53	395.77	403.64	38.1	37.8	37.9	10.46	10.47	10.65

Maricopa County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	**May 1992[b]**	**Apr. 1992[c]**	**May 1991**	**May 1992[b]**	**Apr. 1992[c]**	**May 1991**	**May 1992[b]**	**Apr. 1992[c]**	**May 1991**
Manufacturing	$478.26	$473.30	$443.90	42.1	41.3	40.8	$11.36	$11.46	$10.88
Construction	478.17	472.53	466.50	38.5	38.2	37.5	12.42	12.37	12.44
Retail Trade[d]	299.80	299.04	277.16	33.2	33.6	32.8	9.03	8.90	8.45
Wholesale Trade	405.77	402.38	430.16	38.1	37.5	37.9	10.65	10.73	11.35

Pima County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	**May 1992[b]**	**Apr. 1992[c]**	**May 1991**	**May 1992[b]**	**Apr. 1992[c]**	**May 1991**	**May 1992[b]**	**Apr. 1992[c]**	**May 1991**
Manufacturing	$438.48	$422.93	$405.16	40.6	39.6	39.8	$10.80	$10.68	$10.18
Construction	408.11	404.05	382.67	36.8	36.9	35.4	11.09	10.95	10.81
Public Utilities	664.26	659.74	628.31	42.8	42.4	41.5	15.52	15.56	15.14

Notes:
a) Estimates are based on a sample of full- and part-time production and related workers whose payroll and hours are reported for the pay period that includes the 12th of the month
b) Preliminary and subject to revision following month
c) Revised
d) Excludes eating and drinking places

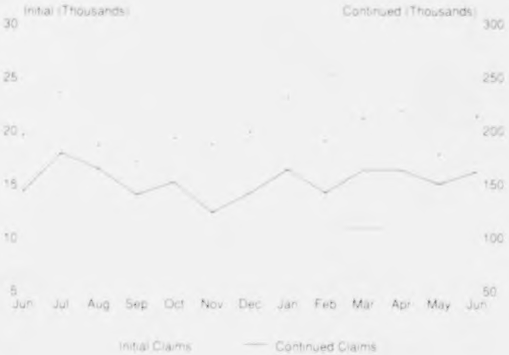
Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, June 1992*

ARIZONA LABOR MARKET INDICATORS

"Arizona Labor Market Indicators," a quick glimpse at data relevant to Arizona's job market, will appear most months in *Arizona Economic Trends*. Some of the data that had appeared each month in the *Arizona Labor Market Information Newsletter*, such as the U.S. and Phoenix-area consumer price indices, will appear at least once a quarter in *Arizona Economic Trends*. If you need this information more frequently, contact Research Administration at 542-3871.

Figure 1

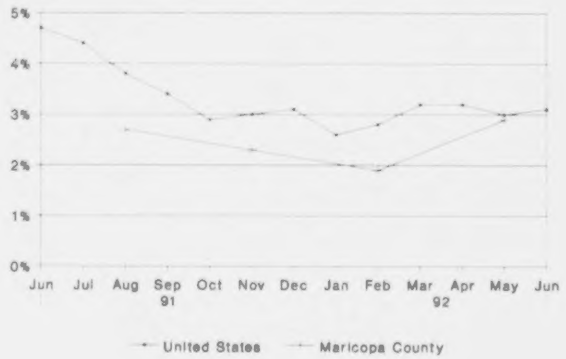
Arizona Continued and New Unemployment Insurance Claims, June 1991-June 1992



Source: *Arizona Dept. of Economic Security, Research Administration, July 1992*

Figure 2

Percentage Change in U.S. (Monthly) and Maricopa County (Quarterly) Consumer Price Indecies, June 1991-June 1992



Sources: *U.S. Dept. of Labor, Bureau of Labor Statistics, July 1992 and Arizona State University, Economic Outlook Center, July 1992*

State Jobless Rate Slipped to 7.2% in May

(continued from page 7)

in automotive and service stations. Although eating and drinking places lost only 100 jobs statewide in May, this sector lost 2,300 jobs over the year, the largest over-the-year decline in more than 10 years.

Arizona's transportation, communications, and public utilities (TCPU) industry group experienced a decline of 900 jobs in May. Some of these losses were associated with the highly publicized layoffs at America West Airlines. Maricopa County experienced a significant proportion of these losses with transportation employment down by 200 over the month.

Arizona's finance, insurance and real estate (FIRE) employment was essentially unchanged in May. Losses in the real estate and insurance sectors were offset by gains in the finance sector. A slight gain of 100 jobs occurred in Pima County.

Arizona's services industry experienced a greater-than-average seasonal decline of 1,300 jobs in May. A drop of 300 is normal. Personal services accounted for roughly 80 percent of the decline, with most of the losses occurring in Maricopa County.

Arizona government employment declined, too, in May. Statewide, school employment was responsible for most of the loss. Seasonal-related declines occurred in the elementary, secondary, and college sectors as employment is typically pared for the summer.

Overall in May, Arizona continued to show moderate employment growth in industries such as construction and manufacturing. But losses continued in defense-related manufacturing sectors as a result of federal defense cutbacks, while other industries began to benefit from a slowly emerging, yet cautious, consumer.

In general, the manufacturing group, sans defense-related sectors, appears to be showing less weakness, while Arizona's retail industry is showing greater weakness than it has for more than a decade. Also, Research Administration expects to see continuing improvement in construction as long as interest rates and inflation remain in check. **AET**

—Don Webbey
RA Economist

Industry Update

"Industry Update" — featured each month as a service to our readers — is a compilation of public announcements and articles from newspapers and periodicals about business events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of industry news is not feasible. In addition, Arizona Economic Trends is not responsible for incorrect information reported by these sources.

Manufacturing

Birmingham Steel, which decided in November 1990 against building a steel mill 50 miles west of Phoenix, has **changed its mind and is now going through the process of obtaining government approval**. The movement toward a free-trade agreement with Mexico and the state's closeness to California, which uses two-thirds of steel consumed in the West, were the two primary reasons Birmingham changed its mind. If given approval, the operation, which would include a mill and plant to melt scrap mill, would likely be ready to roll in two to three years.

General Semiconductor Industries plans to move its Tempe operation to Macroom, Ireland, and will **lay off 160 employees** by the end of July. The Tempe facility, which makes products for computers and telecommunications equipment, is providing a severance package and job-placement services.

Intel Corp., which employs about 4,000 people in the Valley, is **considering Arizona and several other states for a $1 billion plant computer-chip plant** that will eventually lead to between **750 to 5,000 jobs**. Intel's 160-acre campus in Chandler would be the likely location in Arizona. A decision is expected by the end of the year, with an anticipated operational date of 1995.

Continuing its downsizing mode, the **Garrett Engine Division** of Allied-Signal Inc. **laid off 80 workers**, primarily engineers, the end of June. The division, which makes engines for military, commercial, and business aircraft, has eliminated about 1,000 jobs in 1991 and about 400 this year.

Construction

The **Westridge Mall**, at 75th Avenue and Thomas Road in west Phoenix, **and the surrounding area have and will see significant changes** over the next couple of years. At the beginning of 1993, Westridge Mall will begin construction on an 80,000-square-foot Mervyn's and 92,000-square-foot Montgomery Wards, with expected openings the following October. In addition, the 160-acre Westridge Esplanade at 75th Avenue and Encanto Boulevard, which opened last year with a new Wal-Mart, will open Phar-Mor and PetSmart stores later this year. And a new Target store, at 75th Avenue and McDowell, has been proposed.

Bell Road between 75th and 83rd avenues is another hot bed of retail development. Besides work begun on Arrowhead Towne Center at 75th Avenue and Bell Road — a shopping mall with five department stores (see April 1992 newsletter) — several other stores are currently under development or ready to be built. A K mart store, expected to open in the fall, will be part of a 20-acre development at 77th Avenue and Bell Road, while Ross Dress for Less and Target stores will be first phase of the North Valley Power Center, a 555,000-square-foot project at 83rd Avenue and Bell Road. Also, a 230,000-square-foot Arrowhead Power Center, located at the same intersection, is expected to be developed in the near future.

Transportation, Communications, and Public Utilities

Seattle-based **Alaska Airlines** reversed engines and **decided against building a $50 to $70 million maintenance facility** which would have eventually created 2,000 jobs at an average wage of $40,000 a year. Phoenix and Tucson were among five cities still in the hunt for the operation when Alaska made its announcement in late June. A sluggish airline industry was given as the main reason for abandoning plans for the facility.

Evergreen Air Center Inc. was awarded $1 million in loans to help **expand its airline-repair facilities in Marana** just north of Tucson. The loans, partially funded by the Arizona Commerce and Economic Development Commission, will help Evergreen add hangar space to accommodate wide-body planes and create 440 mechanic jobs. Mechanics will be recruited from a number of community college programs in Arizona and from out-of-state.

Trade

As part of national reorganization plan, **Sears Roebuck and Co. will close its credit operation** at The Colonnade in Phoenix around mid-August and **transfer its 270 jobs** to a Sears' facility in Los Angeles. The move follows an announcement last April that 100 jobs at Sears' accounting center at The Colonnade will be eliminated by mid-1993. Sears announced in 1990 that it plans to cut about 40,000 jobs nationally.

A California company that designs and manufactures space-sattelite equipment is moving its headquarters from Manhattan Beach to Gilbert (1140 N. Fiesta Blvd.). **Spectrum Astro Inc. expects to initially employ about 35 people**, but then expand quickly with the addition of engineering and management personnel.

Services

Red River Opry, a country-and-western musical show, is expected to **open by the end of the year in a $2 million, 20,000-square-foot development** in the Papago Park Center on the southwest corner of Mill Avenue and Washington Street. Red River Opry will feature a 1,000-seat theater and offer two-hour performances six nights a week. About 35 to 40 people will eventually be employed, including 12 to 14 full-time actors. AET

State of Unions in U.S., Arizona Not Good

(continued from page 6)

the early 1900s before unions were well-established in the automobile industry.

It may be more of a "which came first, the chicken or egg" question. In other words, perhaps it takes a large share of industry to give rise to a high proportion of unionization. If that is true, Arizona may become more unionized after it attracts more industry here.

Arizona's recently released Strategic Plan for Economic Development (ASPED) does not mention the subject of unionization. It does, however, talk about the need to compete primarily for "quality jobs," not just *any* jobs. Quality jobs are defined by ASPED as those with adequate compensation, career- and personal-development opportunities, advancement opportunities, and flexible employee benefits."[33]

This goal is not unlike the goal of unions over the years. While unions have achieved this goal in many places — sometimes by resorting to the economic force of strikes — Arizona economic planners hope to do the same by educating Arizona employers on the benefits (e.g., better loyalty and productivity) of providing quality jobs. "Quality jobs," says ASPED, "are the key to a high standard of living and quality of life for Arizonans."[34]

Perhaps unions and economic development have more in common than economic developers realize. With union membership in the private sector on a fast decline in Arizona (and nationally), it will be interesting to see if implementation of ASPED can achieve the goal of providing quality jobs by the means ASPED proposes. If not, maybe in another generation there will be a resurgence of union popularity.

Finally, the issue of improving economic well-being by the method of educating employers to provide quality jobs, or by promoting unionization, has national implications. In a global economy, the more significant competing geographic unit is the nation rather than any of a nation's political subdivisions.

The economic-development policies and degree of unionization of Arizona versus those of Michigan have less significance on that scale. Rather, the nation must decide how it will nurture industry, and whether it will assist industry in its competition with industries of other countries. Surely, the national goal should be improved living standards, higher income, and availability of quality jobs, as much as it is the states' goal.

—Ron Simon,
RA Economic Analysis Manager

Table 5

U.S. Work Stoppages and Related Data, 1970, 1980, 1990, and 1991

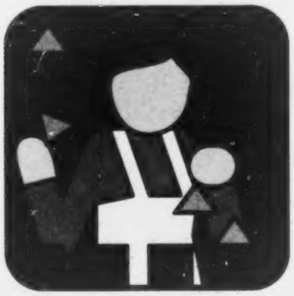
	1970	1980	1990	1991
Work Stoppages[1]	381	187	44	40
Workers Affected	2,468,000	795,000	185,000	392,000
Days Idled	52,761,000	20,844,000	5,926,000	4,584,000
Pct. of Time Lost	0.29%	.09%	.02%	.02%

Note: 1) Includes strikes and lockouts

Source: *U.S. Dept. of Labor, Bureau of Labor Statistics*

Notes:

1. "Union Members in 1991," *USDL News Release*, U.S. Department of Labor, February 10, 1992, p.1.
2. "Manufacturing Climate Study-1989," Leo Troy, Grant Thornton, Inc.
3. "Right to work" is a generic name for state laws making it illegal to require a worker to join a union in order to become employed. In Arizona, the governing law is Article 25 of the state constitution, which became effective on November 25, 1946.
4. "Union Members in 1991," *USDL News Release*, U.S Department of Labor, February 10, 1992, Table 3.
5. "Measuring Union-Nonunion Earnings Differences," Kay E. Anderson, Philip M. Doyle, and Albert E. Schwenk, *Monthly Labor Review*, June 1990, p.26.
6. "Labor Unions and Collective Bargaining," James D. Gwartney and Richard L. Stroup, "Economics: Private and Public Choice," Harcourt, Brace Jovanovich, 1987, pp. 608-609; and "Labor Unions and Their Economic Impact," Campbell R. McConnell, "Economics: Principles, Problems, and Policies," New York, McGraw-Hill Book Co., 1987, p. 789.
7. Ibid.
8. "Economics," Gwartney and Stroup, p. 605; and McConnell, p. 799.
9. Ibid.
10. Ibid.
11. The first call for an eight-hour day by a labor union was by the Machinists and Blacksmith Union at its 1859 annual convention in Philadelphia: "Labor Firsts in America," U.S. Dept. of Labor, Washington D.C., U.S. Government Printing Office, 1979, p.28.
12. "Public Employment: Labor-Management Relations," *1987 Census of Governments*, U.S. Bureau of Census, Washington, D.C., U.S. Government Printing Office, June 1991, pp. 2-27; and "Government Employment: Labor-Management Relations in State and Local Governments," *1982 Census of Governments*, Washington D.C.: U.S. Government Printing Office, June 1984, pp. 2-27.
13. "Labor Relations in the Public Sector," Richard C. Kearney, New York: Marcel



Dekker, Inc., 1984, p 9.

14. Ibid., p 14.
15. Ibid.
16. "One man, one vote" refers to the 1964 Supreme Court judgment in *Reynolds vs Sims*, 377 U.S. 533, making it illegal to model state legislatures after the national Congress by having the upper house of bicameral legislatures composed of the same number of legislators for political subdivisions (e.g., counties) regardless of the population of those subdivisions. Rather, new subdivisions (i.e., senatorial districts) must be created having nearly equal population, and these must be redrawn after each decennial census. The basis for the judgment was the Equal Protection Clause of the Constitution.
17. "Labor Relations," Kearney, p. 9.
18. Ibid., pp. 9-10.
19. The primary technological advancement was "electro-winning," a process of separating copper from ore by use of liquid acids and electrical current. This process was far less labor-intensive than the then-existent methods of using crushers and concentrators. Electro-winning became a commonly used process by the mid-1980s.
20. "A Striking Change: Replacement Hiring Raises Old Questions," Kathleen Ingley, *The Arizona Republic*, October 27, 1991, p. F2.
21. Ibid., p. F1.
22. Ibid.
23. "Moving Mountains on a Picket Line," Paul Glastris, *U.S. News and World Report*, April 20, 1992, p. 20.
24. "This Brawl Could Cost Cat a Couple of Its Lives," Kevin Kelly, *Business Week*, March 23, 1992, p. 82.
25. "Cat to Strikers: 'Show Up Or Else,'" Harris Collingwood, *Business Week*, April 13, 1992, p. 44.
26. "Members of the United Auto Workers Return to Work Monday ... ," *The Associated Press*, printed in *The Phoenix Gazette*, April 21, 1992, p. B3.
27. "Cat Vs. the UAW — Setting the Record Straight," G.S. Flaherty, *Business Week*, March 30, 1992, p. 89.
28. "This Brawl ... ", Kelly, *Business Week*, March 23, 1992, p. 82.
29. "Moving Mountains ... ," Glastris, *U.S. News and World Report*, April 20, 1992, p. 20.
30. "Collective Bargaining, 1991: Recession Colors Talks," Michael H. Cimini and Susan L. Behrmann, *Monthly Labor Review*, January 1992, p 22.
31. "Collective Bargaining, 1991: Recession Colors Talks, Carl Hartman, *The Associated Press*, printed in *The Arizona Republic*, December 28, 1990, p. E2.
32. Ibid.
33. "ASPED: Creating a 21st Century Economy: Arizona's Strategic Plan for Economic Development," SRI International, Vol. 1, January 1992, p.V-33.
34. Ibid. AET

ARIZONA ECONOMIC TRENDS

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ARIZONA ECONOMIC TRENDS

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Job Surveys Scrutinized by Media, Markets

Jobs data provide the first snapshot of the U.S. economy each month. As such, figures often move financial markets, particularly if they show any surprising shifts or trends that are expected to affect policy. Tight security keeps the numbers under wraps until 8:30 a.m. on the first Friday of the month, the appointed time for news media to release the report.

"The employment report is the most important and one of the most comprehensve data series that the government has," says Elizabeth Reiners, a money market analyst with Dean Witter Reynolds in New York City.

"Trends in the labor force are very important in how they relate to earnings and production. If more people are working and getting paid, there are greater jumps in sales, confidence, etc.," Reiners points out.

From start to finish, employment data are collected and released within a three-week period, making it one of the fastest turnarounds for a major economic report issued by the federal government. On separate but parallel tracks the Labor Department's Bureau of Labor Statistics (BLS) begins collection of the data from households and businesses.

Census Bureau enumerators conduct the Current Population Survey (CPS), also called the household survey, for BLS by making phone calls or personal visits to some 60,000 scientifically selected households around the country. The payroll survey — done through a federal-state cooperative program — collects information from about 360,000 non-farm business establishments.

Raw data arrive at BLS' main office in Washington, D.C., on the Monday and Tuesday before their release, entering the final days of a process that began only two weeks earlier. BLS officials will have just four days to crunch the numbers and prepare their analysis before the press and public receive the data on the first Friday of the month.

BLS economist spend the early part of the week preparing a news release, including several pages of figures in tabular form, and a statement from BLS Deputy Commissioner William Barron. On Thursday morning, Bar-

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Issue Focuses on Ups, Downs of Job-Data Programs

Each month, DES, Research Administration releases a series of employment and unemployment reports that receive a considerable amount of attention from the media, economists, public and private policymakers, and businesses inside and outside the state.

These data series, which are published in a news release, *Arizona's Workforce*, and later in *Arizona Economic Trends*, are a product of two federal-state cooperative programs — the Current Employment Statistics (CES) and Local Area Unemployment Statistics (LAUS) programs. These program's primarily derive their data from an employment survey of business establishments, also known as the payroll survey, and from the Current Population Survey (CPS), conducted by the U.S Census Bureau.

Because Arizona is a relatively small state — in terms of population and size of its samples — wide monthly fluctuations in some of the data series, such as the unemployment rate, can and do occur. Also, because the payroll survey is dependent on businesses donating time to provide information, a delay in receiving data from firms makes the first release of

(continued on page 2)

ron meets with officials and analysts in the agency's employment division to discuss how they will present the data.

Once Barron and his deputies have approved the news release and statement, they are sent to the printers where 10,000 copies are made. Late Thursday afternoon, a BLS official calls the chairman of the Council of Economic Advisors to provide him with key data from the employment report, marking the first time the figures have left BLS. The council assists the White House in preparing any comments that President Bush or other officials might have in reaction to the data.

On the first Friday, reporters can get the report at 8 a.m., with any release of data embargoed for 8:30 a.m. Simultaneously, Barron briefs Labor Secretary Lynn Martin on the report and, almost every month, prepares to present it to Congress' Joint Economic Committee at 9:30 a.m.

Surveys Show Contrasting Views

The framework and concepts of the two surveys are quite different, a fact that often leads to a divergence of the two measures of employment derived from the data series. While confusion occasionally results from this divergence, analysts are quick to stress that they value both surveys, finding that together they provide a comprehensive view of labor market trends that would not be possible if there were only one set of data.

"It is important to have two surveys. ... I would be nervous without a check on the payrolls from the household survey," says economist Donald Ratajczak, director of Georgia State University's Economic Forecasting Center. He adds that the household survey is the only source of demographic data.

The household survey counts people, while the payroll survey counts jobs. This difference alone accounts for a great deal of the divergence in employment growth shown by the two data series, points out Bregger. An increase in multiple jobholding (persons holding two or more jobs) during the late 1980s means that the payroll survey will often show greater job growth than the household count.

Most private analysts say they get their best reading on the economy from the payroll survey, partly because it is derived from business records rather than a person's recollection of labor market activity as in the household survey. The payroll survey is "a more complete count, a large sample, and more consistent," says economist David Wyss of Data Resources, Inc., in Lexington, Mass.

BLS fashions its sample of payroll establishments from the listing of more than 6 million non-farm businesses that are covered by the unemployment insurance system in each of the 50 states and District of Columbia. About 98 percent of all non-farm employees are covered by the UI system.

While computerized data collection is used somewhat, the overwhelming majority of establishments in the survey submit information on their payrolls through the mail to state employment agencies. There the data are checked and transmitted to BLS' main office in Washington.

Handling data from the 360,000 firms in the survey each month is a "monumental" task, says George Werking, chief of BLS' division of monthly industry employment statistics. The BLS survey is the largest business survey anywhere in the world, he notes.

One week before the data are released, BLS analysts in Washington cut off the flow of figures in what they call "the first closing." They need the remaining few days to tabulate and analyze the data, explains Werking. At the first closing, the agency typically has 50 to 55 percent of the total sample in, a proportion that sometimes makes for sizable revisions in the following months.

By the "second closing" a month later, BLS has data from slightly more than 80 percent of respondents. Coverage goes as high as 90 percent in the third closing, which is two months after the initial estimates are released.

Issue Looks at Job-Data Programs

(continued from front page)

Arizona data — in time for the monthly press release - often susceptible to some revision.

These facts should not detract from the value of the data, but rather put the value of the data in perspective. And in order to give readers a general understanding of how these data series are derived on both a statewide and national basis — and clear up some misconceptions about these series — *Arizona Economic Trends* is publishing this month two articles on these data programs, plus a brief overview of plans for other Bureau of Labor Statistics' programs, operated by Research Administration in Arizona.

First, *AET* is reprinting a story from the *Daily Labor Report* that gives an overview of the monthly process of collecting and tabulating employment and unemployment data; the types of data collected and how they are used; and the plusses and minuses of the current system. Then, an article by CES/LAUS Supervisor Phillip Heinrich (page 5) looks at how Arizona's CES LAUS programs operate within the parameters of the national system; outlines several factors that affect the quality of Arizona's data; and points out Research Administration's plans for maintaining and improving the quality of these data series. Finally, a related story written by Research Administrator Dan Anderson (page 5) gives a brief glimpse at upcoming plans for these data series, as well as for other BLS programs under Research Administration.

Table 1

Characteristics of Payroll and Current Population Surveys

Payroll Survey

- Target Group — Establishments (360,000 units)
- Object of Measurement — Employment (non-farm wage and salary jobs), Hours and Earnings (levels, change)
- Measured by — Detailed Industry (two-, three-, and four-digit SIC code)[1]
- Type of Indicator — Economic
- Area Covered; Frequency — National, States and District of Columbia, and 270 Metropolitan Areas; Monthly
- Collection Agent — States and District of Columbia
- Collection Mode — Principally by Mail Shuttle

Current Population Survey

- Target Group — Households (60,000 units)
- Object of Measurement — Labor Force, Unemployment, Employment (levels, change)
- Measured by — Demographics (Age, Sex, Race)
- Type of Indicator — Social and Economic
- Area Covered; Frequency — National, 11 States, 2 Metropolitan Areas; Monthly
- Collection Agent — Census Bureau
- Collection Mode — Personal Visit or Telephone

Note:

1. SIC = Standard Industrial Classification code, as established by *Standard Industrial Classification Manual*, 1987

Source: The Bureau of National Affairs, Inc. May 1991

Establishments provide information on five key questions: how many employees were on the payroll during the week that included the 12th of the month; how many employees are women; how many non-supervisory employees are there; what is the total payroll in dollars; and, what was the total of hours paid, including overtime, for the reference period.

From the data come BLS' monthly profile of employment, hours, and earnings in major industries. The payroll survey figures become part of several other major economic data series maintained by other federal agencies — including the industrial production index, personal income, real earnings, productivity indexes, and the leading economic indicators.

Households Provide Demographics

While the payroll survey provides industry data, the household survey offers a wealth of demographic information used to assess social as well as economic trends. The survey also provides the numbers that yield the most watched indicator of the series — the unemployment rate.

Some analysts find the household data more useful than payroll data at certain times. "I prefer to look at the household data at turning points," says economist Susan Sterne, who heads Economic Analysis Associates, Inc. in Stowe, Vt. She argues that the payroll survey has a big-business bias that keeps it from picking up some types of shifts very quickly.

Each month, 1,500 Census Bureau data collectors, or enumerators, set the wheels in motion as they fan out to homes in scientifically selected geographic areas. In just one week, enumerators conduct interviews — either in person or on the telephone — with persons in 60,000 households across the United States.

The data are gathered during the week that includes the 19th of the month, with all questions pertaining to labor market activity occurring during the week that includes the 12th of the month. This mid-month timing generally avoids holidays, Bregger says, thus making it easier to collect data.

Interviewers log many evening hours as they attempt to reach persons who are not home during the day. Nationwide, about half of all married-couple families have both the husband and wife working. About 68 percent of monthly interviews are done over the telephone.

Households rotate in and out of the survey for a period of 16 months. Respondents are in the survey for four months, out for eight months, and then back in for four months. This rotation is done in an effort to "make the sample as current as possible," as well as to prevent the survey from becoming too burdensome on respondents, Bregger says.

During the interview, which takes about 10 or 15 minutes, enumerators ask a household representative a series of questions to determine the labor force experiences of all civilian members of the household who are 16 years and older. Each person described in the survey is later classified according to his or her activities — basically as employed, unemployed, or not in the labor force.

Employed or Unemployed?

To be classified as employed, a person must have worked at least one hour during the week including the 12th of the month. This includes those on strike, locked out, or temporarily laid off — anyone who expects to return to his or her job.

To be counted among the unemployed, a person must meet three criteria: has not worked in the reference week, is currently available for work, and has looked actively for work in the prior four weeks. All others — including those considered discouraged workers because they are not seeking work — are classified as not in the labor force for purposes of BLS' count.

After years of study, the bureau is currently testing new questions for the household survey, which has been the same since the mid-1960s when family and labor market dynamics were quite different from today. The revised questionnaire — scheduled to be introduced in January 1994 — will include a series of questions designed to get a better handle on the discouraged worker question. This politically sensitive issue becomes particularly important during economic hard times with some analysts arguing that discouraged workers — currently about 1.1 million — should be counted among the unemployed.

Once Census enumerators have their interviews completed, they send data to regional offices. Reports for all households are sent to the Census Bureau facility in Jeffersonville, Ind., where they are coded for industries and occupations. Finally, the data are transmitted by wire to U.S. Census headquarters in Suitland, Md., for processing before they are turned over to BLS.

Users Offer Views, Criticisms

As widely used data series, the employment surveys are not without their critics. To a large extent, criticisms reflect the styles or inclinations of the private forecasters and money market analysts who use the data. Some are bothered by revisions; others recognize them as part of virtually all data programs.

Economist Joel Popkin says he "perceives" that there have been larger and more frequent revisions in the payroll data over the last two years (1990 and 1991). Popkin suggests that BLS consider a smaller sample survey of establishments, perhaps along the lines of the employment cost index program.

Economist Wyss says that "the revisions are getting worse for a number of reasons," including budget cuts at BLS during the 1980s. He also cites compliance problems that the agency may be having. "Putting out a survey is not a high priority for executives in many firms.

Wyss also notes that, like other federal data series, the payroll employment program has not caught up with the growth in services industries, which now account for three out of four jobs in the non-farm private sector.

Other analysts are less critical of revisions. "I tend not to rely on monthly data. ... I rely more on anecdotal evidence," says Lawrence Chimerine, president of Radnor Consulting Group, Wayne, Pa. "I think you have to be careful about overanalysis of the data," he adds.

"Revisions are a fact of life," says Reiners, who is not sure if revisions are greater or if analysts just focus on them more than they did before.

BLS Responds to Critics

For their part, BLS officials concede that there have been times when revisions in payroll employment have been larger than they anticipated. "We have trouble whenever the revision in total payroll employment is larger than 100,000," in a given month, concedes Werking. Most of the problems came in 1990 when the agency had a hard time keeping track of census workers hired for the decennial count, Werking explains.

Early in 1991, when analysts were trying to gauge the depth of the recession, there was a notably large revision in payroll employment that altered the general view of the slowdown. The first estimate showed non-farm payrolls declining by 185,000 in February 1991, but when the revised data were released they showed a drop of 250,000. Most of the revision was in retail trade and services, where a few major firms apparently did not submit their data by the "first closing."

Overall, the bureau's biggest problem is not a lack of response from firms, but the difficulty in eliciting a timely response, Werking says. For the last eight years, BLS has experimented with various ways to improve timeliness so that a larger proportion of firms are covered in the "first closing." Use of high-tech, data-gathering methods has improved response time, he says. But as of May 1991, about only 10,000 out of 360,000 firms in the survey used either touchtone telephone or voice data entry systems each month.

While recognizing the problems that revisions cause forecasters, Werking argues that sometimes the agency is "held to a level that is a little unrealistic." He points out that each year BLS verifies its count and releases a benchmark revision that justifies figures with the universe of UI system reports filed with states.

Some private forecasters concede that there is considerable pressure for them to read more into the data than perhaps they should. "Sometimes we are trying to get information out of the data that isn't there. We're looking at it upside down and every which way to get at it. We're really squeezing a stone," says Ratajczak.

Financial market analysts get pressure from all sides — traders and brokers in their own firms, as well as the press — says Reiners. She joins other analysts in encouraging BLS to do what it can to trim revisions, but underscores that the timely release of data often sacrifices a degree of accuracy.

— Pam Ginsbach,
Staff Editor,
"Daily Report for Executives"

Excerpted from Daily Labor Report, No. 85, pp. C1-C-6 (May 2, 1991). Copyright 1991 by The Bureau of National Affairs, Inc; (1-800-373-1033) AET

Sample Size Plays Role in State's Results

Current Employment Statistics (CES) and Local Area Unemployment Statistics (LAUS) are two federal/state cooperative programs that provide crucial, early indicators of Arizona's economic directions. Both public and private policymakers watch these statistics closely.

In Arizona, the CES program counts the number of non-farm payroll jobs each month for the state and its 15 counties. LAUS (pronounced louse) measures the state's total employment and unemployment rate, and from these statistics the total number of unemployed and the seasonally adjusted unemployment rates for the state and its 15 counties are calculated.

Arizona's CES Program

In Arizona, the CES program estimates wage and salary employment based on a sample of approximately 4,000 employers with 6,000 establishments, covering well over one-third of the statewide payroll employment. The sample is stratified by industry, size, and area to be representative of employment throughout the state.

Most of the data are collected directly from employers through a mail survey; the remainder come in by telephone, electronic mail from regional offices of the U.S. Department of Labor's Bureau of Labor Statistics (BLS), and reports mailed from other states.

Nationally, CES data, which measure employment for the pay period that includes the 12th of each month, are normally released on the first Friday of the following month. For example, August 1992 CES data for the nation as a whole will be available September 4. However, Arizona publishes its data 10 days to two weeks later. For instance, August 1992 CES data will be published September 18.

At the national level, BLS publishes data on 54 major industry and subindustry categories. In Arizona, DES, Research Administration publishes data on 33 major industry and subindustry categories at the statewide level; 27 major and subindustry groups in Maricopa County; 22 major and subindustry groups in Pima County; and the nine major industry categories in the 13 non-metropolitan counties. More detailed industry information is published in larger geographic areas (e.g., U.S., Arizona) because of the strict statistical reliability criteria BLS demands, meaning the need for a large enough sample.

Arizona's LAUS Program

The LAUS program measures total employment and the unadjusted employment rate for the nation as a whole and the 11 most populous states from data gathered from the Current Population Survey (CPS), which surveys about 60,000 households nationally (see "Job Surveys," front page).

But in Arizona and the 39 least-populated states, also known as non-direct-use states, the CPS sample is too small to be statistically reliable. (The CPS samples about 620 households in Arizona.) Therefore, to limit potential wild month-to-month swings in these data, for non-direct-use states BLS has developed mathematical equations that combine CPS data with other variables.

In Arizona, the total employment model includes payroll employment data from the CES program, plus estimates of the number of agricultural workers, the self-employed, domestic workers, and unpaid family workers. Meanwhile, the unemployment rate is calculated from an equation that includes unemployment claims, the CPS employment estimate, and the number of new entrants into the labor force. In June of each year, a fourth factor is added to account for students entering the job market.

BLS Upgrading Programs in Wide Number of Areas

Since 1947, the state of Arizona, in cooperation with the U.S. Department of Labor's Bureau of Statistics (BLS), has produced monthly statewide employment and unemployment statistics. And more recently, what is now the Department of Economic Security's Research Administration (RA) generates not only monthly unemployment and employment data for each county and the state's major metropolitan areas, but also provides a wide range of occupational and population statistics.

These data are used by public and private entities for a number of applications — from developing tax revenue and economic forecasts to measuring employers' efforts at creating equal employment opportunities for minorities. And the frequency of usage is just as broad. Some users track the data month-to-month, while others only need annual or decennial data.

Many people view statistical systems as dry, unchanging, number-crunching operations. But the truth is far different. Currently, there are about 30 different BLS initiatives under way to keep data-collection programs up-to-date with the needs of users, the changing economic environment, and the availability of new technology.

Following are highlights of some of these efforts, with a more complete list of initiatives shown in Table 1.

Redesigning Current Population Survey — With data from the 1990 census now available, the monthly Current Population Survey (CPS) — used in determining state and county employment and

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These two equations, known as the variable-coefficient models, have been used for the past three years. They are more accurate than a building-block method that had been in place since the 1960s. The building-block method, however, is still used to determine total employment and the unemployment rates in the state's 15 counties. This is done by disaggregating, or proportionally dividing, the state totals to the 15 counties.

The building-block procedure, now known as the state system program (SSP), contains 43 steps and includes many of the variables used in the employment and unemployment rate models, plus a number of other variables.

After the county statistics have been calculated, total employment and unemployment rate figures are further disaggregated to produce data for more than 100 Arizona cities, towns, and unincorporated areas. Calculations are made based on these areas' share of their county total employment and unemployment rate estimates in the most recent census. The results are then published in Research Administration's monthly "Special Unemployment Report."

CES Revisions

Because CES data are released to the public within a short time period of first being collected — three weeks, nationally, and five weeks in Arizona — they are subject to monthly revisions. Part of this is due to the amount of detailed information that is rapidly prepared and subject to estimating error, and part is due to receiving only a percentage of employer surveys before monthly publishing deadlines.

Regarding the latter, only 50 to 65 percent of Arizona's surveys are normally received in time for the CES unit's initial deadline, known as first closing. Data from these surveys are then used to produce preliminary CES estimates, which are published in the state's monthly press release, *Arizona's Workforce*.

Preliminary CES figures are revised twice at the national level and once in Arizona. For example, national CES data for August 1992 will be released on September 4 and subsequently revised October 2 and November 6, while Arizona's CES estimate for August will be released September 18 and revised October 20.

BLS is continually working to reduce the size of CES revisions by instituting several projects on a national and state level.

Currently, BLS' "Large Reporter Project" is seeking to improve the percentage of on-time surveys from large employers. Statistical studies have clearly demonstrated that the accuracy of preliminary estimates can be improved if data from more large employers are available by first closing.

A major part of this project are two BLS programs being implemented to speed data collection. CATI (computer-assisted telephone interview) allows collection of data by telephone using specially programmed computers and trained operators. And TDE (touchtone data entry) further speeds data collection by allowing employers to directly input their data over telephone lines with a touchtone telephone.

Both of these programs are being evaluated in a growing number of states, but it is not currently known when Arizona will receive equipment and training for either of these programs. In the meantime, however, Arizona is working to reduce its CES revisions in two ways.

First, since the CES survey in Arizona and in most other states is voluntary, new reporters continually have to be recruited to replace firms that have gone out of business, changed ownership, or simply refuse to continue to supply monthly data. Responding to this need, Arizona's CES Unit has significantly expanded the size of its sample through intensive recruitment. The state's CES sample now includes more than 600,000 of Arizona's 1.5 million wage and salary workers.

In addition, the CES unit is stratifying its sample by geographic area and size class so it will be more representative of the industry and geographic area it is measuring. Statistical studies have demonstrated that this should significantly increase the accuracy of the CES estimates.

A second area where Arizona expects to limit the size of its CES revisions is by changing how the statewide and small-county (all but Maricopa and Pima) estimates are calculated. Because of limitations in computer software, the statewide CES estimates are currently measured by simply adding up wage and salary jobs for 48 industries in all 15 counties. But this methodology presents two major problems.

One, in many of the counties employment in certain industries (e.g., copper mining) are too small to be accurately estimated. In these cases, projections have been made based on historical trends. During stable economic times this procedure is adequate, but in economic recessions or expansions estimating this way may miss turning points that are crucial to the accurate analysis of CES data.

Another problem with the current CES estimating methodology is its lack of flexibility. By having to estimate wage and salary employment in 48 industries in all 15 counties, it wastes analysts' valuable time every month and does not add to the accuracy of the statewide estimate. At the same time, calculating more detailed information about the state and metropolitan counties is currently not possible because the software is limited to estimating 48 industries.

Arizona's CES unit is exploring new software to make the estimating methodology more reflective of the employment patterns of the state and individual counties. If this research is successful, a number of additional industries will be estimated and publish-

Table 1

Percentage Change Between Original Estimate and Benchmark Revision of Non-farm Wage and Salary Employment, in Selected States, 1985-1991[1]

State	1985	1986	1987	1988	1989	1990	1991	'91 Rank
Deleware	**0.1%**	**0.0%**	**-0.4%**	**-0.8%**	**0.7%**	**-0.1%**	**0.0%**	**1 (tie)**
Michigan	1.7	1.7	0.9	1.2	0.0	1.5	0.0	1 (tie)
Wisconsin	**-0.7**	**0.1**	**1.0**	**0.2**	**1.0**	**0.4**	**-0.1**	**3**
New Mexico	0.6	0.5	-1.1	0.1	1.4	1.1	0.2	4
Utah	**-0.3**	**-0.4**	**-0.5**	**0.4**	**0.7**	**-0.1**	**-0.3**	**5 (tie)**
Montana	-1.1	-1.8	1.0	1.2	-0.6	-0.6	-0.3	5 (tie)
Minnesota	**-0.8**	**-0.4**	**0.8**	**0.4**	**0.4**	**-0.4**	**0.3**	**5 (tie)**
Iowa	0.5	-1.2	-0.7	0.2	0.2	-0.3	-0.3	5 (tie)
Alabama	**1.6**	**1.4**	**0.5**	**1.5**	**1.1**	**1.9**	**-0.3**	**5 (tie)**
Arizona	**0.5**	**-0.1**	**0.0**	**-0.1**	**1.6**	**-1.1**	**-1.3**	**30 (tie)**
Nevada	**-1.2**	**0.6**	**-0.3**	**0.9**	**0.6**	**-0.3**	**-1.3**	**30 (tie)**
California	0.6	0.1	0.0	-0.2	1.0	0.7	-2.6	47

Note:

1. Benchmarked through March of year shown

Source *U.S. Department of Labor, Bureau of Labor Statistics, 1986-1992*

ed for the state, Maricopa County, and Pima County, possibly as soon as May 1993. Statewide, between 55 and 60 industries will be estimated, while Maricopa County will have between 50 and 55 estimating cells and Pima County, around 50. However, the non-metropolitan counties will continue to have payroll employment figures for only nine major industry groups, although more detailed estimates in some counties may be possible at a later data.

CES Benchmarking

In addition to monthly revisions, state CES estimates are checked for accuracy each March through a process called "benchmarking."

Benchmarking balances CES' estimates to payroll employment totals produced from unemployment insurance (UI) records, which account for about 98 percent of wage and salary employment in the country. This process results in an accurate count of employment, as well as provides a baseline from which monthly CES estimates measure the direction and magnitude of change.

For the most recent benchmark, the period ending March 1991, Arizona's CES wage and salary estimates were revised downward by 1.3 percent, or 19,800 jobs.[1] This divergence was larger than usual, but as Table 1 shows, results from the 1991 benchmark period (April 1990 through March 1991) were not good for many states.

On a national level, part of the problem in 1991 was as undetected downturn of employment between December 1990 and January 1991, particularly in several large states, such as New York and California. An undercount of layoffs in small and newly formed companies — up to 2 million in the first quarter of 1991 — likely contributed to large revisions last March.2

And in Arizona, the significant 1991 revision was also due to the small size of CES' sample and the inflexibility of its estimating methodology. It is expected that improvements outlined above will likely prevent such a large error from occurring in the future.

(continued on back page)

Table 1

Current and Planned Bureau of Labor Statistics and Research Administration Projects

✔ Redesign Current Population Survey (CPS)
✔ Modernize CPS System and Provide More Micro-Data to States
✔ Improve Accuracy of Preliminary Current Employment Statistics (CES) Data
✔ Produce Seasonally Adjusted CES and CPS data
✔ Expand Reporting of Service Sector in CES Program
✔ Move All States to CPS Direct-Use
✔ Enhance Local Area Unemployment Statistics (LAUS) Program Methodology
✔ Analyze Decennial Census and CPS Data
✔ Develop Exportable Mass Layoff Statistic (MLS) System
✔ Collect Wage Data in Occupational Employment Statistics (OES) Survey
✔ Refine Business Establishment List (BEL) Program
✔ Modernize Processing Systems
✔ Estimate Hours and Earnings for All Workers
✔ Analyze Special Labor Market Issues (e.g., military downsizing effect on manufacturing sectors)
✔ Improve Accuracy of Affirmative-Action Data
✔ Track Data in Disadvantaged Areas
✔ Better Understand Impact of Foreign Direct Investment
✔ Better Understand Job-Creation Process
✔ Better Understand Impact of Business Formation
✔ Publish Data on Employee Turnover and Job Openings
✔ Measure Quality of Employer Data

BLS Upgrading Programs in Number of Areas

(continued from page 5)

unemployment totals — needs to be updated to reflect changing statewide demographics. Of critical importance to Arizona is improving CPS' accuracy. This can be done in a number of ways: one obvious possibility is increasing the size of the sample (currently 620 households in this state; another consideration would be to change the distribution of sampled households across the state.

Improving Accuracy of Industry Employment Estimates — Monthly employment-by-industry figures, provided by the Current Employment Survey (CES), are regarded as the first and best measure of economic health — both nationally and locally. With interest rates and stock market changes sensitive to these numbers, accuracy is a critical issue. A related article on this page and an item directly below touch on several ways to improve the accuracy of the nation's and Arizona's CES data.

Expanding Release of Service-Sector Data — Service-producing sectors account for 83 percent of Arizona's non-farm wage and salary employment, but only a little more than half (17 of 32) of the industry groups reported in the state's CES program. Obviously, the sectoral detail in reporting payroll employment in the service sectors does not match its reporting detail. To increase service-sector detail will require an increase in federal or state funding, or at least approval from BLS to shift resources currently dedicated to sampling firms in goods-producing industries.

Refining Business Establishment List (BEL) — Until recently, BLS' ES-202 program, which uses unemployment insurance records to publish a variety of employment data, only coded employers' locations at the county level. However, many requests for ES-202 data were at the city or sub-city level. BLS and each state are currently working on a multi-year effort to identify the physical location of all employers — those with single and multiple locations. This will allow a more accurate picture of local employment in counties such as Maricopa, where there are number of municipalities and unincoporated areas.

Modernize Processing Systems — Much of RA's data processing occurs on mainframe computers. But recent personal computer technology provides the opportunity to migrate these systems to a platform that is more suitable for RA's purposes and will save time and money. RA currently spends large amounts of money on customized systems that do not take advantage of these personal computer software packages.

Improving Affirmative-Action Data — Employers who are analyzing minority and female composition of their workforce, relative to the overall workforce, have found current affirmative-action data to be of limited value. In terms of timeliness and accuracy, alternatives to using census reports to produce this data need to be explored. One possibility is using the yearly average of CPS data to update census data; another proposal is expanding the Occupational Employment Statistics (OES) survey to obtain race and sex data by occupation.

Data on Employee Turnover and Job Openings — In the 1970s, RA conducted employer surveys that measured jobs employers were trying to fill and the stability of their workforce. Unfortunately, funding levels were reduced and those surveys were dropped. A number of users, such as employment and training professionals, have asked that these suveys be restored. But before the surveys can begin, significant developmental work in terms of definitions, process, and products needs to be undertaken. Two states have already tested the concept.

—Dan Anderson
Research Administrator

Unemployment Up, But Rate Down in June

Arizona's economy failed to demonstrate improvement in June as unemployment continued climbing after shrinking during the previous two months. While unemployment was up 14,900, this was slightly less than seasonally expected and, coupled with an increase in total employment of 15,900, led to the unemployment rate moving down one-tenth of a percentage point to 7.1 percent.

ARIZONA'S WORKFORCE

Unemployment rates in Maricopa, Pima, and the rural counties, for the most part, maintained their positions relative to one another. Overall, eight counties had jobless rates in June that were lower than in May, while six counties had higher rates.

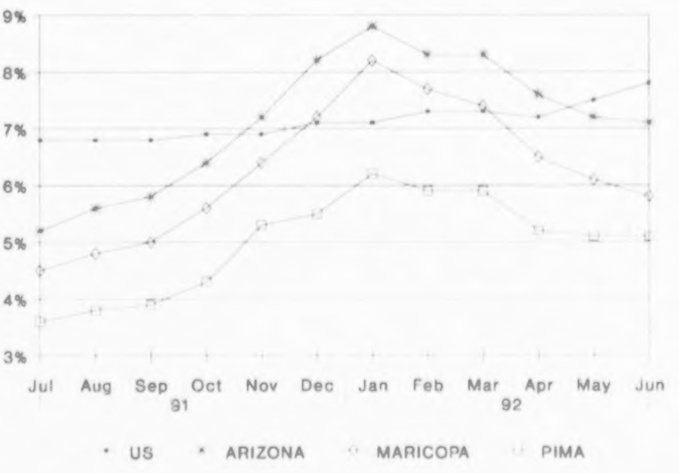
Maricopa County's seasonally adjusted rate dropped 0.3 percentage points to 5.8 percent; Pima County's rate held at 5.1 percent, but remained the lowest in Arizona; and rural county unemployment rates ranged from 7.3 percent in Yavapai County to 22.6 percent in Yuma County.

The end of the school year always brings a rise in unemployment as youth and school staff enter the labor market. In addition, school employment declines take government employment down significantly. This June, government employment dropped 31,400, a seasonal 11 percent decline and all but 1,000 of Arizona's payroll job losses of 32,400 for the month.

There was little in June's employment change to promote optimism about Arizona's economy. While Arizona's loss of payroll jobs was only 1,000 more than seasonally normal, June marked the first month since January 1983 that Arizona has posted an over-the-year loss in wage and salary jobs (down 1,400 from June 1991).

Figure 1

U.S., Arizona, Maricopa County, and Pima County Unemployment Rates (Seasonally Adjusted), July 1991-June 1992



Source: Arizona Dept. of Economic Security, Research Administration, July 1992

Retail trade looked the most bleak among industry losers as another 2,500 retail jobs disappeared in June. After six straight monthly losses, retail trade was down 1,200 jobs from June 1991, and the industry has posted over-the-year losses since March, the first month of annual decline since February 1983.

Retail trade sectors that lost the most employment in June were food stores (800) and eating and drinking places (1,500).

Manufacturing Continues Slide

Arizona lost another 100 manufacturing jobs in June with 22,400 having been lost since manufacturing employment peaked at 190,700 in September 1988. Aircraft and missiles manufacturers dropped another 500. Their employment peaked at 28,000 in July 1990 and has dropped to its current level of 21,900.

The only good news of significance in the June employment statistics was that construction gained 1,700 more jobs, principally in the residential construction sector. Arizona construction was up 3,500 from a year ago to a level of 81,700 jobs. June marked the fourth consecutive month with over-the-year construction gains, an event not experienced in Arizona since 1986.

A surprise came in the transportation industry in June. Despite all the publicity of airline companies suffering financially from price wars, Arizona gained 200 jobs. This was the first transportation gain in six months. Nevertheless, the transportation industry was still down 2,200 jobs from a year ago.

Overall, June's employment statistics gave mixed signals, but the stronger signals were for continuing weakness in the months ahead. The unemployment rate dropped for the third consecutive month; payroll jobs declined for the second straight month; manufacturing employment continued downward, especially in the defense-related components; retail trade continued downward for the sixth consecutive month; and construction continued growing. But unless the nation's economy takes a dip sometime in the last two quarters of the year, Arizona job declines may soon reach their trough. AET

—Ron Simon,
RA Economic Analysis Manager

Table 1

Arizona Labor Force, Employment, and Unemployment Data, June 1992[a]

(In Thousands)

				Monthly/Yearly Change	
	Jun. 1992[b]	May 1992[c]	Jun. 1991	May '92 - Jun. '92	Jun. '91 - Jun. '92
Total Civilian Labor Force[d]	1747.0	1716.2	1715.9	30.8	31.1
Total Unemployment	135.3	120.4	96.5	14.9	38.8
Unemployment Rate	7.7%	7.0%	5.6%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	7.1%	7.2%	5.1%	—	—
Total Employment	1611.7	1595.8	1619.4	15.9	-7.7
Total Wage and Salary Employment[f, g]	1476.3	1508.7	1477.7	-32.4	-1.4
Private Sector	1222.2	1223.2	1224.4	-1.0	-2.2
Government	254.1	285.5	253.3	-31.4	0.8
Goods-Producing Industries	264.3	262.7	268.2	1.6	-3.9
Manufacturing	168.3	168.4	176.4	-0.1	-8.1
Total Durable Goods	124.2	124.7	132.5	-0.5	-8.3
Stone, Clay, and Glass	5.2	5.3	5.6	-0.1	-0.4
Primary and Fabricated Metals	13.7	13.6	14.2	0.1	-0.5
Primary Metals	5.6	5.6	5.9	0.0	-0.3
Fabricated Metals	8.1	8.0	8.3	0.1	-0.2
Machinery	52.4	52.9	55.0	-0.5	-2.6
Aircraft and Missiles	21.9	22.4	26.9	-0.5	-5.0
Lumber and Wood Products (Excluding Furniture)	6.8	6.6	6.4	0.2	0.4
Total Non-durable Goods	44.1	43.7	43.9	0.4	0.2
Food and Kindred Products	10.2	10.1	9.6	0.1	0.6
Printing and Publishing	15.6	15.6	15.8	0.0	-0.2
Mining and Quarrying	14.3	14.3	13.6	0.0	0.7
Copper Mining	12.0	12.0	11.1	0.0	0.9
Construction	81.7	80.0	78.2	1.7	3.5
Service-Producing Industries	1212.0	1246.0	1209.5	-34.0	2.5
Transportation, Communications, and Public Utilities	79.2	79.0	81.4	0.2	-2.2
Transportation	45.2	45.0	47.2	0.2	-2.0
Communications and Public Utilities	34.0	34.0	34.2	0.0	-0.2
Trade	369.4	372.3	371.0	-2.9	-1.6
Total Wholesale Trade	74.4	74.8	74.8	-0.4	-0.4
Total Retail Trade	295.0	297.5	296.2	-2.5	-1.2
General Merchandise and Apparel	49.1	49.4	47.9	-0.3	1.2
Food Stores	49.1	49.9	50.4	-0.8	-1.3
Automotive and Service Stations	34.7	34.7	34.2	0.0	0.5
Eating and Drinking Places	103.9	105.4	105.1	-1.5	-1.2
Finance, Insurance, and Real Estate	92.0	91.9	93.2	0.1	-1.2
Services and Miscellaneous	417.3	417.3	410.6	0.0	6.7
Hotels and Lodging Places	39.0	40.2	39.9	-1.2	-0.9
Business Services	87.3	87.2	84.2	0.1	3.1
Health Services	109.0	108.4	104.6	0.6	4.4
Government	254.1	285.5	253.3	-31.4	0.8
Federal	44.3	45.8	45.2	-1.5	-0.9

Notes and Source: See Table 3

Table 2

Maricopa County Labor Force, Employment, and Unemployment Data, June 1992[a]

(In Thousands)

				Monthly/Yearly Change	
	Jun. 1992[b]	May 1992[c]	Jun. 1991	May '92 - Jun. '92	Jun. '91 - Jun. '92
Total Civilian Labor Force[d]	**1071.8**	**1050.3**	**1076.8**	**21.5**	**-5.0**
Total Unemployment	**68.1**	**62.6**	**51.5**	**5.5**	**16.6**
Unemployment Rate	**6.4%**	**6.0%**	**4.8%**	—	—
Unemployment Rate (Seasonally Adjusted)[e]	**5.8%**	**6.1%**	**4.4%**	—	—
Total Employment	**1003.7**	**987.7**	**1025.3**	**16.0**	**-21.6**
Total Wage and Salary Employment[f, g]	**968.5**	**982.6**	**973.8**	**-14.1**	**-5.3**
Private Sector	740.3	758.6	755.6	-18.3	-15.3
Government	135.2	147.2	132.9	-12.0	2.3
Goods-Producing Industries	**399.4**	**402.5**	**413.5**	**-3.1**	**-14.1**
Manufacturing	**125.4**	**125.5**	**132.0**	**-0.1**	**-6.6**
Total Durable Goods	94.0	94.5	100.6	-0.5	-6.6
Stone, Clay, and Glass	2.8	3.0	3.2	-0.2	-0.4
Primary and Fabricated Metals	9.4	9.3	9.8	0.1	-0.4
Machinery	43.6	43.9	45.7	-0.3	-2.1
Total Non-durable Goods	31.4	31.0	31.4	0.4	0.0
Food and Kindred Products	7.3	7.2	7.0	0.1	0.3
Printing and Publishing	10.9	11.0	11.1	-0.1	-0.2
Mining and Quarrying	**0.8**	**0.8**	**0.8**	**0.0**	**0.0**
Construction	**54.2**	**53.0**	**50.9**	**1.2**	**3.3**
Service-Producing Industries	**788.1**	**803.3**	**790.1**	**-15.2**	**-2.0**
Transportation, Communications, and Public Utilities	**55.4**	**55.1**	**57.9**	**0.3**	**-2.5**
Transportation	33.1	32.9	35.4	0.2	-2.3
Communications and Public Utilities	22.3	22.2	22.5	0.1	-0.2
Trade	**240.9**	**244.1**	**246.1**	**-3.2**	**-5.2**
Total Wholesale Trade	56.5	56.6	58.0	-0.1	-1.5
Total Retail Trade	184.4	187.5	188.1	-3.1	-3.7
General Merchandise and Apparel	31.0	31.2	30.6	-0.2	0.4
Food Stores	30.5	31.6	32.2	-1.1	-1.7
Automotive and Service Stations	21.3	21.4	21.1	-0.1	0.2
Eating and Drinking Places	65.7	67.2	67.2	-1.5	-1.5
Finance, Insurance, and Real Estate	**73.3**	**73.3**	**74.1**	**0.0**	**-0.8**
Services and Miscellaneous	**283.3**	**283.6**	**279.1**	**-0.3**	**4.2**
Hotels and Lodging Places	23.2	24.0	23.3	-0.8	-0.1
Business Services	70.7	70.6	68.5	0.1	2.2
Health Services	70.6	70.3	67.7	0.3	2.9
Government	**135.2**	**147.2**	**132.9**	**-12.0**	**2.3**

Notes and Source: See Table 3

Table 3
Pima County Labor Force, Employment, and Unemployment Data, June 1992[a]

(In Thousands)

				Monthly/Yearly Change	
	Jun. 1992[b]	May 1992[c]	Jun. 1991	May '92 - Jun. '92	Jun. '91 - Jun. '92
Total Civilian Labor Force[d]	322.6	322.7	304.5	-0.1	18.1
Total Unemployment	17.3	15.4	11.3	1.9	6.0
Unemployment Rate	5.4%	4.8%	3.7%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	5.1%	5.1%	3.5%	—	—
Total Employment	305.3	307.3	293.2	-2.0	12.1
Total Wage and Salary Employment[f, g]	257.4	268.1	252.5	-10.7	4.9
Private Sector	203.5	203.5	199.0	0.0	4.5
Government	53.9	64.6	53.5	-10.7	0.4
Goods-Producing Industries	41.4	41.3	41.7	0.1	-0.3
Manufacturing	24.0	24.0	25.0	0.0	-1.0
Total Durable Goods	18.6	18.6	19.9	0.0	-1.3
Total Non-durable Goods	5.4	5.4	5.1	0.0	0.3
Mining and Quarrying	2.3	2.3	2.3	0.0	0.0
Construction	15.1	15.0	14.4	0.1	0.7
Service-Producing Industries	216.0	226.8	210.8	-10.8	5.2
Transportation, Communications, and Public Utilities	10.6	10.6	9.9	0.0	0.7
Transportation	6.0	6.0	5.5	0.0	0.5
Communications and Public Utilities	4.6	4.6	4.4	0.0	0.2
Trade	62.9	63.0	60.7	-0.1	2.2
Total Wholesale Trade	9.3	9.3	8.8	0.0	0.5
Total Retail Trade	53.6	53.7	51.9	-0.1	1.7
General Merchandise and Apparel	7.8	8.0	7.7	-0.2	0.1
Food Stores	8.2	8.2	8.1	0.0	0.1
Automotive and Service Stations	5.7	5.7	5.5	0.0	0.2
Eating and Drinking Places	19.1	19.3	18.5	-0.2	0.6
Finance, Insurance, and Real Estate	11.7	11.7	11.8	0.0	-0.1
Services and Miscellaneous	76.9	76.9	74.9	0.0	2.0
Hotels and Lodging Places	6.5	6.8	6.4	-0.3	0.1
Business Services	12.5	12.4	11.6	0.1	0.9
Health Services	23.1	23.1	22.5	0.0	0.6
Government	53.9	64.6	53.5	-10.7	0.4

Notes:
a) Data on labor force, total unemployment, total employment, and seasonally adjusted unemployment rate should not be used for economic-assistance programs. Data for economic-assistance programs are available by contacting DES, Research Administration
b) Preliminary and subject to revision following month
c) Revised
d) Adjusted to Current Population Survey (CPS) to reflect place of residence
e) Normal seasonal variations have been eliminated to reflect underlying trends
f) By place of work; does not include agricultural workers, self-employed, unpaid family members, and domestic workers
g) Detail may not add up correctly due to rounding
h) Rounded to the nearest one-quarter

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, July 1992*

Table 4

Non-metropolitan Counties' Labor Force, Employment, and Unemployment Data, June 1992(a,b)

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz
Total Civilian Labor Force(d)	**14,525**	**37,660**	**44,950**	**14,400**	**8,075**	**3,550**	**7,400**
Total Unemployment	**3,025**	**3,325**	**4,500**	**1,800**	**875**	**400**	**700**
Unemployment Rate	**20.8%**	**8.8%**	**10.0%**	**12.5%**	**10.9%**	**11.1%**	**9.6%**
Unemployment Rate (Seasonally Adjusted)(e)	**16.5%**	**8.2%**	**8.4%**	**12.4%**	**10.9%**	**11.1%**	**10.3%**
Total Employment	**11,500**	**34,325**	**40,450**	**12,600**	**7,200**	**3,150**	**6,700**
Total Wage and Salary Employment(f,h)	**14,000**	**26,400**	**40,825**	**12,100**	**4,700**	**3,325**	**3,400**
Private Sector	9,500	15,600	29,700	9,150	3,075	2,850	2,525
Government	4,500	10,800	11,125	2,950	1,625	475	875
Goods-Producing Industries	**775**	**2,250**	**4,850**	**3,375**	**400**	**2,300**	**575**
Manufacturing	475	1,125	3,200	1,425	200	25	250
Mining and Quarrying	25	125	125	1,200	0	2,025	50
Construction	275	1,000	1,525	750	200	250	275
Service-Producing Industries	**13,225**	**24,150**	**35,975**	**8,725**	**4,300**	**1,025**	**2,825**
Transportation, Communications, and Public Utilities	1,650	1,525	2,475	450	150	50	150
Trade	1,750	5,850	10,700	2,675	1,500	325	1,200
Finance, Insurance, and Real Estate	400	625	775	225	125	25	125
Services and Miscellaneous	4,925	5,350	10,900	2,425	900	150	475
Government	4,500	10,800	11,125	2,950	1,625	475	875

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
Total Civilian Labor Force(d)	**40,325**	**26,950**	**39,900**	**12,425**	**42,625**	**59,650**
Total Unemployment	**3,725**	**4,250**	**4,575**	**2,125**	**3,075**	**17,425**
Unemployment Rate	**9.3%**	**15.8%**	**11.5%**	**17.0%**	**7.2%**	**29.2%**
Unemployment Rate (Seasonally Adjusted)(e)	**9.2%**	**13.2%**	**10.3%**	**14.6%**	**7.3%**	**22.6%**
Total Employment	**36,600**	**22,700**	**35,325**	**10,300**	**39,550**	**42,225**
Total Wage and Salary Employment(f,h)	**27,900**	**20,175**	**29,475**	**11,000**	**28,725**	**28,375**
Private Sector	22,875	14,900	21,300	9,175	23,625	21,075
Government	5,025	5,275	8,175	1,825	5,100	7,300
Goods-Producing Industries	**5,175**	**3,550**	**9,225**	**1,350**	**5,650**	**3,000**
Manufacturing	2,500	1,625	2,925	1,000	2,525	1,625
Mining and Quarrying	25	1,075	5,525	0	1,000	0
Construction	2,650	850	775	350	2,125	1,375
Service-Producing Industries	**22,725**	**16,625**	**20,250**	**9,650**	**23,075**	**25,375**
Transportation, Communications, and Public Utilities	1,400	1,475	875	700	1,025	1,300
Trade	8,800	4,675	5,625	5,050	8,375	9,050
Finance, Insurance, and Real Estate	1,225	525	625	275	1,000	1,000
Services and Miscellaneous	6,275	4,675	4,950	1,800	7,575	6,725
Government	5,025	5,275	8,175	1,825	5,100	7,300

Notes and Source: See Table 3

Table 5
Estimated Hours and Earnings of Production Workers, by Selected Industry Groups, June 1992[a]

Arizona

Industry	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	June 1992[b]	May 1992[c]	June 1991	June 1992[b]	May 1992[c]	June 1991	June 1992[b]	May 1992[c]	June 1991
Manufacturing	$445.50	$447.17	$430.92	40.5	40.8	40.5	$11.00	$10.96	$10.64
Aircraft and Missiles	690.69	659.13	657.30	46.2	44.9	45.3	14.95	14.68	14.51
Food and Kindred Products	367.25	367.93	344.37	37.9	39.1	39.0	9.69	9.41	8.83
Primary Metals	487.60	517.88	494.22	40.0	41.2	39.1	12.19	12.57	12.64
Machinery	453.40	456.96	430.11	40.7	40.8	40.5	11.14	11.20	10.62
Copper Mining	647.96	633.82	649.00	43.9	43.0	44.0	14.76	14.74	14.75
Construction	462.47	464.82	446.75	38.7	38.8	37.7	11.95	11.98	11.85
Public Utilities	787.52	787.95	761.24	43.8	42.5	44.7	17.98	18.54	17.03
Retail Trade[d]	286.71	282.97	273.37	33.3	32.6	32.7	8.61	8.68	8.36
Wholesale Trade	399.65	393.78	409.34	38.2	37.6	38.4	10.47	10.47	10.66

Maricopa County

Industry	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	June 1992[b]	May 1992[c]	June 1991	June 1992[b]	May 1992[c]	June 1991	June 1992[b]	May 1992[c]	June 1991
Manufacturing	$471.74	$475.02	455.95	41.6	42.0	41.3	$11.34	$11.31	$11.04
Construction	476.91	476.91	473.10	38.9	38.9	38.0	12.26	12.26	12.45
Retail Trade[d]	300.94	299.13	287.05	33.7	33.2	33.3	8.93	9.01	8.62
Wholesale Trade	400.68	398.63	431.20	37.8	37.5	38.5	10.60	10.63	11.20

Pima County

Industry	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	June 1992[b]	May 1992[c]	June 1991	June 1992[b]	May 1992[c]	June 1991	June 1992[b]	May 1992[c]	June 1991
Manufacturing	$403.28	$413.26	$416.56	37.1	38.3	40.6	$10.87	$10.79	$10.26
Construction	409.21	417.38	380.02	37.1	37.5	36.4	11.03	11.13	10.44
Public Utilities	643.81	662.97	659.60	42.3	42.8	42.5	15.22	15.49	15.52

Notes:
a) Estimates are based on a sample of full- and part-time production and related workers whose payroll and hours are reported for the pay period that includes the 12th of the month
b) Preliminary and subject to revision following month
c) Revised
d) Excludes eating and drinking places

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, July 1992*

Industry Update

"Industry Update" — featured each month as a service to our readers — is a compilation of public announcements and articles from newspapers and periodicals about business events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of industry news is not feasible. In addition, Arizona Economic Trends is not responsible for incorrect information reported by these sources.

Manufacturing

The Arizona Commerce and Economic Development Commission took off its hat and welcomed a Compton, Calif., headwear company to Arizona with a low-interest loan when **Atlas Headwear Inc.** decided recently to **move its operations to Phoenix**. Atlas expects to **employ 165 people** at a 40,000-square-foot facility it is leasing at 501 N. 37th Drive beginning in September. Among its clients are Walt Disney Productions and the U.S. military.

The recent merger of two food processing and distribution companies is leading to the creation of **30 to 40 jobs in Tempe**. **GB Industries**, which was formed by the merger of Global Enterprises of Sandwich, Ill., and Brimtec of San Diego, was expected to locate several of its operations at Elliot Park 10, 1839 W. Drake Drive by Aug. 1. GB will specialize in making and distributing non-perishable and dehydrated foods.

About **150 Navajos** who live on the reservation have been contracted to work with an Albuquerque company, American Indian Designer Collection, to **produce beadwork for a new line of Reebok tennis shoes**. Reebok plans to produce about 700,000 beaded shoes initially with a selling price between $125 and $400.

A $50 million investment by computer-chip maker Intel Corp. of Santa Clara, Calif., may yield **several hundred jobs** for the Tempe operations of **VLSI Technology Inc.** of San Jose. VLSI, which currently employs about 300 people at its Tempe operation, will use Intel's technology to make computer chips for hand-held computers, an emerging growth area for the high-tech industry. Intel's Arizona operations are not expected to directly gain jobs through the joint venture, which allows Intel to buy a 20 percent stake in VLSI.

Transportation, Communications, and Public Utilities

America West Airlines announced in late July it would **cut 1,500 positions** and get rid of 15 aircraft by September. The cost-cutting move was expected to save the Phoenix-based airline $7 million a month and give it a fighting chance to remain afloat. American West, which will still have about 10,500 employees nationwide after the cuts, filed for bankruptcy protection in June 1991 and hopes through these cuts and additional financing it can establish a basis for filing a reorganization plan.

Australian-owned **Qantas Airways Ltd.** is **moving its U.S. reservation center from San Francisco to Tucson**, bringing with it about 100 to 120 jobs. The reservation facility is expected to open by the end of October, but little details have been given about potential worker salaries. Qantas is the second major airline to open a reservations center in Tucson, following the lead of American Airlines in 1991.

Slack business caused **Lockheed Aeromod Center** in Tucson to **lay off about one-third of its workforce**, or 125 employees, in early July. The cuts at the aircraft-maintenance center, however, may only be temporary as work tends to pick up in the fall.

Trade

Work began in late July on a **$10 million shopping complex in San Luis, Ariz.**, expected to bring up to **400 jobs** to the border town near Yuma when completed in about two years. San Luis Plaza will include a Mega Foods grocery store and an 87-store retail shopping area called Price Center. The latter is expected to open in the first half of 1993. CDB Construction is building the 27-acre project.

Kmart and Target stores will **anchor a proposed 300,000-square-foot retail center** at the northeastern corner of Superstition Freeway and Power Road in Mesa, it was announced in mid-July. The 32-acre site, which is part of the Superstition Springs master-planned community, will also include one or two other major stores. No timetable for construction has been given.

The **Bashas'** grocery chain has started construction on a **$4.3 million, 310,000-square-foot warehouse** and distribution facility in Chandler to service its 56 stores throughout the state. Currently, Bashas' has several warehouses its leases, and the company expects to save money by eventually consolidating its operations in the new facility.

Services

PCS Inc. of Scottsdale expects to **hire 200 claims processors** beginning in October thanks to winning a three-year federal contract. PCS, which currently employs about 800 people, will handle benefit claims for prescription drugs dispensed under the Blue Cross and Blue Shield Federal Employee Program, which covers about 3.1 million workers. PCS business is expected to increase about 15 percent.

The **Days Inn motel chain opened a reservations center in Phoenix** in mid-July, which is initially expected to employ about 160 people. The facility, located in the former headquarters of Ramada Inc., 3838 E. Van Buren St., will also handle group sales and customer-service functions, which were moved from Days Inn's home base in Knoxville, Tenn. Days Inn currently has about 1,300 franchised motels and anticipates as many as 2,000 by 1995.

Service Express, a Scottsdale-based, commercial-cleaning service that primarily services hotels is **expanding into the Tucson market** and expects to **hire about 25 workers** by the end of September. Positions range from entry-level cleaners to managers.

Sample Size Plays Role in State's Results

(continued from page 7)

LAUS Revisions

LAUS estimates for total employment and the unemployment rate are also revised the following month and benchmarked annually. Monthly figures are recalculated using more complete CES, agricultural, and UI employment data. Similarly, benchmarked LAUS calculations include final figures for those variables.

Currently, BLS is implementing a number of changes for Arizona that should improve the accuracy of LAUS statistics.

First, separate mathematical equations for total employment and the unemployment rate are being developed for Maricopa and Pima counties. The economies of these two metropolitan counties are quite different than the state as a whole and therefore should be calculated separately.

Second, starting in January 1994, census data used as variables in LAUS calculations for cities, towns, and unincorporated areas will be updated, improving the accuracy of subcounty employment and unemployment rate estimates. Currently, proportional breakdowns based on 1980 census data are still being used to produce monthly subcounty statistics.

Summary

In conclusion, it is important to remember that monthly CES and LAUS estimates are not designed to be an exact measure of the level of total employment, non-farm payroll employment, or the unemployment rate. An accurate level is set once a year by the benchmarking process.

What the monthly figures do measure is *change*. However, because of the factors mentioned earlier, Research Administration (RA) cautions users of CES and LAUS data against putting too much emphasis on data for any one month; rather, RA recommends looking at a minimum of three- or fourth-month trends.

Nevertheless, Arizona's monthly CES and LAUS numbers remain important because they are the first reliable estimates of the direction of the state and substate economies. Because of this fact, BLS and Arizona's CES/LAUS unit will continually work to improve their accuracy.

—Phillip Heinrich
CES/LAUS Supervisor

Notes:

1. Benchmarking covers estimates through March of the previous year. For example, benchmarking in March 1992 covered CES estimates for period from April 1, 1990, through March 31, 1991.
2. "Job losses in '91 might be doubled," *The Associated Press*, printed in *The Arizona Republic*, Feb. 5, 1992. **AET**

ARIZONA ECONOMIC TRENDS

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The purpose of *Arizona Economic Trends* is to provide an update and analysis of state and county employment and economic data, as well as information on state and national programs and policies that affect the nation's and Arizona's labor markets. Included in this publication twice yearly are Research Administration's two-year projections of employment, unemployment, and labor force for Arizona and its major sub-state regions.

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ARIZONA ECONOMIC TRENDS

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Job Creation in State Should Pick Up in '93

Economic conditions nationwide have shown little improvement since DES, Research Administration issued its two-year employment forecast for Arizona in late February. Among major U.S. economic indicators, unemployment has remained relatively high, consumer spending has remained weak, and interest rates have continued to fall due to lack of demand for capital.

U.S. unemployment figures for August revealed an almost negligible decline of one-tenth of one percent from July, to 7.6 percent still well above a rate of 7.1 percent at the beginning of the year. Currently, nearly 10 million people who want to work cannot find work, and about 1.2 million others are estimated to be discouraged from looking for a job, believing there simply are no jobs available.

The relatively high unemployment rates, however, contrast with higher profits reported by many corporations. Many of these improved financial reports are the result of major cost-cutting efforts — such as large reductions in white- and blue-collar positions — and are pitted against the rather poor performances of the previous year. Nevertheless, industry analysts are continuing to revise downward their earlier 1992 profit estimates for mid-size and Fortune 500 companies.

It's no wonder that consumers, trying to make sense of all of this, are

Forecast Update

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Variables Indicate Slow Growth, Not Another Recession

Research Administration's two-year employment and labor market forecasts are primarily the product of the Arizona Employment Forecasting Model (AEFM). The AEFM is a 200-equation econometric model that simulates various economic scenarios to produce employment projections for Arizona and its major substate regions.

Variables used in the model include forecasts of statewide employment, unemployment, and population data, as well as national factors, such as interest rates and the inflation rate. Research Administration (RA) uses U.S. economic forecasts derived by The WEFA Group, a Pennsylvania-based national forecasting organization.

The major assumption underlying RA's updated forecast for 1992-93 is that there will be a weak, but continuing recovery during the forecast period. While national employment numbers continue to be disappointingly weak, RA agrees with The WEFA Group that modest growth is more likely than another national recession.

The WEFA Group expects Real Gross Domestic Product (GDP) to grow by 2 percent in 1992 (on an annualized basis), before picking

(continued on back page)

standing on the sidelines, unwilling to commit to small and large purchases. Consumer spending is resultantly far more conservative than just a few years ago, but then there is much the consumer has had to digest. Debt levels for consumers, businesses, and governments are either near or at all-time highs. And demand for borrowing, according to May figures, was at a record low.

Low Rates Should Help Economy

Although the U.S. economy is currently in recovery, it is at a far slower pace than most analysts earlier expected. On the other hand, there are many positive factors that should eventually help bolster the national (and Arizona's) economy.

Current monetary policy has managed to keep inflationary factors relatively low, as reflected in recently released producer and consumer price indices. In addition, mortgage interest rates are at near 20-year lows, and the discount rate — the rate the Federal Reserve Bank charges banks for funds — is the lowest in nearly 30 years.

Arizona

Arizona has certainly not been immune to these national trends. During the first six months of 1992, Arizona's economy, as measured by wage and salary employment growth, has been anemic. Arizona payroll employment grew an annual average of four-tenths of one percent during the first two quarters, compared with annual growth of nine-tenths of one percent for 1991.

And although the state has continued to show over-the-year wage and salary job gains each month, the margins have been diminishing of late. June and July 1992 figures revealed the lowest over-the-year job-growth levels since the early 1980s.

But there are some signs of moderate strength in Arizona. The most significant of these is the rebound of the construction sector, which through August has had six consecutive months of employment growth, with some 3,300 construction jobs having been added. And as housing buyers respond to lower interest rates and attractive prices, related industries (e.g., non-durable goods manufacturing, real estate, finance) are beginning to show enhanced results, as well.

Figure 1

Arizona vs. U.S. Unemployment Rates, Actual (1984-1991) and Projected (1992, 1993)

Source: Arizona Dept. of Economic Security, Research Administration, August 1992; U. S. Dept. of Labor, Bureau of Labor Statistics, 1984-1991; and The WEFA Group, August 1992

7,400 New Payroll Jobs in '92

Research Administration's updated forecast predicts Arizona's wage and salary employment will grow by an annual average of five-tenths of one percent in 1992, or an additional 7,400 jobs. And provided interest rates and inflationary factors remain low and consumer confidence improves, moderate gains in employment are expected in 1993.

Arizona's construction industry employment is projected to average 1.8 percent growth for 1992. This will be the first employment gain this industry has seen since 1986. The forecast for 1993 is for continued growth with an average employment increase of 2.3 percent.

In an environment of continuing low interest rates and property affordability, consumer demand should continue to improve, especially in the residential real estate market. Oversupply still plagues the non-residential market, but this with time should change.

Research Administration forecasts manufacturing employment will decline 4.5 percent in 1992, averaging only 168,600 jobs for the year. Job losses will be primarily in the durable-goods group where the machinery, and aircraft and missiles sectors have borne the brunt of the declines in recent years.

U.S. Department of Defense cutbacks are expected to result in further layoffs in Arizona's manufacturing sector throughout 1992. Regionally, Maricopa County should be impacted the most. With layoff activity expected to diminish in 1993, manufacturing employment is projected to sustain only a one-tenth of one percent loss next year.

The transportation, communications, and public utilities (TCPU) group is projected to finish 1992 with an employment loss of 2.2 percent, or 1,800 jobs. And the following year, TCPU is expected to have a slight gain of eight-tenths of one percent, or an increase of 600 jobs over 1992 levels.

Transportation companies, airlines in particular, have been facing intense competition and, as a result, slim profit margins. Companies have been forced to enact serious cost-cutting measures due to price-matching efforts, in order to maintain a position in the marketplace. Further, the public utilities sector has continued its cost-cutting efforts.

Research Administration (RA) expects Arizona's trade industry will end 1992 with a slim one-tenth of one percent employment increase, or a mere 400 new jobs. Only the automotive sector is expected to show any marked improvement, but this follows a couple of years of employment decreases.

Arizona's trade industry — at both the retail and wholesale levels — has had declining employment growth rates since 1984. Both local and national economies have contributed to trade's slower growth, since growth in this industry group typically reflects consumer confidence and financial strength.

The forecast for trade in 1993 is for a slow, but stable rebound of 1.7 percent job growth, as consumer confidence grows due to improved general economic trends.

Several Factors Hurting FIRE

Within the last several years, the finance, insurance, and real estate (FIRE) group has seen the effects of deregulation, the savings and loan crisis, increased competition, mergers and acquisitions, and consolidations. The results of these events are still prevalent, but should begin to wane after 1992.

RA forecasts FIRE to end 1992 with an eight-tenths of one percent employment loss with FIRE resurging in 1993 with modest 1.5 percent growth.

Figure 2

Arizona Wage and Salary Employment Growth Rates, Actual (1984-1991) and Projected (1992, 1993)

Source: Arizona Dept. of Economic Security, Research Administration, August 1992

Table 1

Arizona Labor Force, Employment, and Unemployment Data, Actual (1991) and Projected (1992, 1993)

(in Thousands)

	1991	Growth Rate	1992	Growth Rate	1993	Growth Rate
Labor Force	1,704.0	-1.3%	1,735.1	1.8%	1,755.8	1.2%
Unemployment	96.0	4.3%	126.1	31.4%	114.9	-8.9%
Unemployment Rate	5.6%	—	7.3%	—	6.5%	—
Total Employment	1,608.0	-1.6%	1,609.0	0.1%	1,640.9	2.0%
Total Wage and Salary Employment[a]	1,497.6	0.8%	1,505.0	0.5%	1,534.1	1.9%
Manufacturing	176.5	-4.9%	168.6	-4.5%	168.5	-0.1%
Mining	13.6	7.9%	14.2	4.4%	14.4	1.4%
Construction	77.5	-6.3%	78.9	1.8%	80.7	2.3%
TCPU[b]	80.9	-1.5%	79.1	-2.2%	79.7	0.8%
Trade	373.3	1.4%	373.7	0.1%	379.9	1.7%
FIRE[c]	92.7	-1.5%	92.0	-0.8%	93.4	1.5%
Services	412.0	2.6%	420.5	2.1%	432.9	2.9%
Government	271.2	4.7%	277.9	2.5%	284.7	2.4%

Notes: a) Totals may not add due to rounding
b) Transportation, Communications, and Public Utilities
c) Finance, Insurance, and Real Estate

Source: Arizona Dept. of Economic Security, Research Administration, August 1992

Mortgage-refinancing and credit-card servicing activity is expected to boost employment in the finance sector.

The services industry in Arizona continues to show resiliency. Over the last couple of years, only the hotels/motels sector has reflected signs of weakness by having to pare employment. This industry is heavily linked to discretionary spending, reduced by the weak national economy. RA expects employment in hotels/motels, however, will improve over the next 18 months.

Overall, RA projects services will add 8,500 jobs, or an increase of 2.1 percent, in 1992. Tourism should rebound slowly; business services and health services will maintain lower, yet attractive rates of job growth. In 1993, services employment is projected to grow at a rate of 2.9 percent.

Arizona's mining industry will continue to create jobs in 1992. Higher copper prices (see "Industry Update," p. 18), coupled with below-average inventories, should result in increased mining activity. For 1992, mining employment is expected to increase by 600, or a 4.4 percent growth rate. Both domestic and international producer demand should fuel this growth. For 1993, mining jobs are expected to grow 1.4 percent.

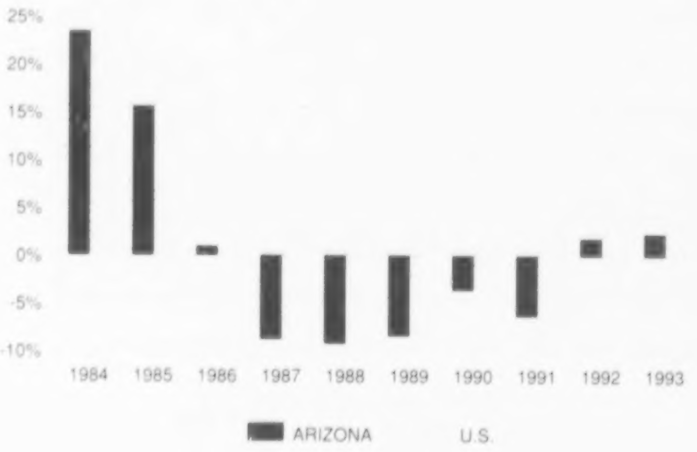
Jobless Rate to Drop in '93

Finally, the seasonally adjusted unemployment rate is expected to end 1992 averaging 7.3 percent, up dramatically from 5.6 percent in 1991. But in 1993, the state's rate is expected to move downward to an average of 6.5 percent.

Meanwhile, total employment — which includes wage and salary employment, plus the self-employed, agricultural workers, domestic workers, and unpaid family members — is expected to grow by one-tenth of one percent in 1992, quite an improvement compared to a loss of 1.6 percent in 1991. An increase in total employment of 2 percent is projected for 1993. Much of the improvement will be coincident with national

Figure 3

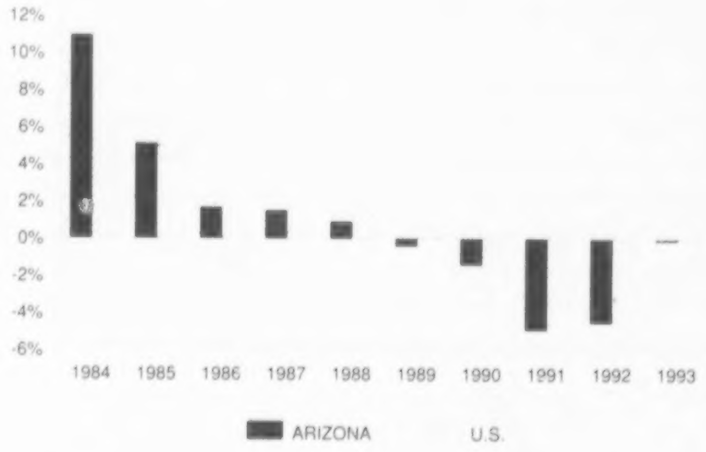
Arizona vs. U.S. Construction Employment Growth Rates, Actual (1984-1991) and Projected (1992, 1993)



Source: *Arizona Dept. of Economic Security, Research Administration, August 1992; U.S. Dept. of Labor, Bureau of Labor Statistics, 1984-1991; and The WEFA Group, August 1992*

Figure 4

Arizona vs. U.S. Manufacturing Employment Growth Rates, Actual (1984-1991) and Projected (1992, 1993)



Source: *Arizona Dept. of Economic Security, Research Administration, August 1992; U.S. Dept. of Labor, Bureau of Labor Statistics, 1984-1991; and The WEFA Group, August 1992* economic improvements and enhanced consumer confidence levels.

In summary, Arizona's economy is expected to sustain slow, yet positive job growth for the rest of 1992 and 1993, in spite of the recent national recession. Low interest rates, housing affordability, and pent-up demand for homes should fuel additional job growth. Also, trade and services employment is expected to rebound as consumer confidence improves and discretionary spending increases. And government employment is expected to increase, but at slower growth rates than seen in previous years.

Maricopa County

Maricopa County's total wage and salary employment dropped slightly (0.1 percent) in 1991. And Research Administration's updated forecast calls for wage and salary employment to decline an additional 0.2 percent in 1992 with losses occurring in manufacturing, TCPU, trade, and FIRE. By 1993, all of these major industry groups should return to positive growth with overall wage and salary employment growing 1.9 percent.

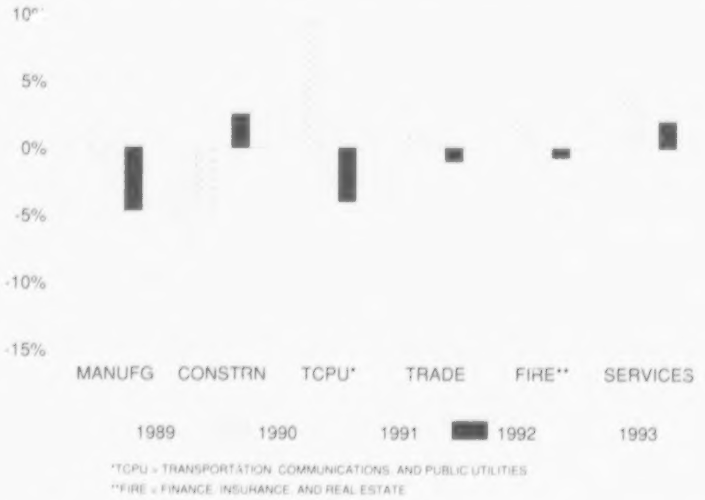
Among major industry groups, trade, services, and government traditionally have showed the strongest job growth in Arizona, as well as in Maricopa County. These three industries account for more than two-thirds of the wage and salary jobs in the county.

But while services and government should continue to create jobs during the forecast period in Maricopa County, trade employment is expected to decline. RA's updated forecast calls for trade employment to fall by 2,400 in 1992, but regain strength in '93 with the addition of 3,600 jobs. Services employment is projected to increase by 5,600 in 1992 and 9,000 in 1993. Finally, government should end 1992 with an increase of 2,900 jobs, then gain another 3,200 positions in 1993.

The construction industry, which lost 4,300 jobs in 1991, this year should post its first over-the-year gain since 1985. RA's updated forecast

Figure 5

Maricopa County Wage and Salary Employment Growth Rates, by Selected Major Industry Groups, Actual (1984-1991) and Projected (1992, 1993)



Source: *Arizona Dept. of Economic Security, Research Administration, August 1992*

Table 2

Maricopa County Labor Force, Employment, and Unemployment Data, Actual (1991) and Projected (1992, 1993)

(in Thousands)

	1991	Growth Rate	1992	Growth Rate	1993	Growth Rate
Labor Force	1,054.8	-2.4%	1,062.9	0.8%	1,076.4	1.3%
Unemployment	51.4	10.5%	66.3	29.0%	59.6	-10.1%
Unemployment Rate	4.9%	—	6.2%	—	5.5%	—
Total Employment	1,003.4	-3.0%	996.6	-0.7%	1,016.8	2.0%
Total Wage and Salary Employment[a]	984.3	-0.1%	982.8	-0.2%	1,001.4	1.9%
Manufacturing	132.2	-4.8%	126.0	-4.7%	126.4	0.3%
Mining	0.7	-12.5%	0.8	14.3%	0.8	0.0%
Construction	51.1	-7.8%	52.4	2.5%	53.7	2.5%
TCPU[b]	57.3	-2.6%	55.0	-4.0%	55.1	0.2%
Trade	247.9	0.1%	245.5	-1.0%	249.1	1.5%
FIRE[c]	74.0	-1.9%	73.5	-0.7%	74.6	1.5%
Services	280.6	2,4%	286.2	2.0%	295.2	3.1%
Government	140.5	4.4%	143.4	2.1%	146.6	2.2%

Notes:
a) Totals may not add due to rounding
b) Transportation, Communications, and Public Utilities
c) Finance, Insurance, and Real Estate

Source: *Arizona Dept. of Economic Security, Research Administration, August 1992* calls for job growth of 2.5 percent in both 1992 and 1993.

Turning to manufacturing, defense-related cutbacks are expected to result in further employment declines for the durable goods sector in Maricopa County in '92, as well as '93. Non-durable goods manufacturing, however, should finish 1992 with positive, but weak job growth, after non-durable goods employment declined 3.4 percent in '91.

For 1993, continued improvements in non-durable goods employment should help offset somewhat employment declines in the durable goods sector. The manufacturing industry as a whole is expected to lose an additional 6,200 jobs in 1992, before adding 400 new positions in 1993.

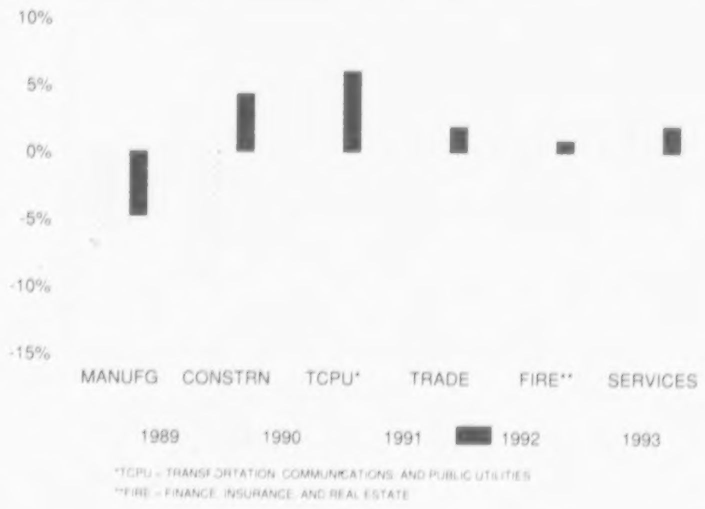
The transportation, communications, and public utilities (TCPU) industry group is expected to drop 2,300 positions in 1992. Declines in the transportation sector should account for most of this loss; with cutbacks in the communications and public utilities sectors coming to an end. Minor job growth is forecast for 1993, but weakness within TCPU will be apparent with the expected addition of only 100 jobs.

The finance, insurance, and real estate (FIRE) industry group lost 1,400 jobs in 1991 with most of the loss attributed to the finance sector. Employment declines are predicted to continue for the finance sector in 1992 with moderate growth occurring by 1993. Modest growth is expected for the insurance and real estate sectors in both forecast years. FIRE as a whole is forecast to be down 500 jobs in 1992, but add 1,100 jobs in 1993.

The unemployment rate in Maricopa County increased by six tenths of a percentage point in 1991, to 4.9 percent (on an annual average basis). RA's forecast calls for the unemployment rate to increase by 1.3 percentage points in 1992, averaging 6.2 percent. Improved employment opportunities in 1993 should help lower the rate to 5.5 percent.

Figure 6

Pima County Wage and Salary Employment Growth Rates, by Selected Major Industry Groups, Actual (1984-1991) and Projected (1992, 1993)



Source: Arizona Dept. of Economic Security, Research Administration, August 1992

Table 3

Pima County Labor Force, Employment, and Unemployment Data, Actual (1991) and Projected (1992, 1993)

(in Thousands)

	1991	Growth Rate	1992	Growth Rate	1993	Growth Rate
Labor Force	311.7	0.6%	322.4	3.4%	327.4	1.6%
Unemployment	12.2	-5.4%	16.6	36.1%	15.8	-4.8%
Unemployment Rate	3.9%	—	5.1%	—	4.8%	—
Total Employment	299.5	0.9%	305.8	2.1%	311.6	1.9%
Total Wage and Salary Employment[a]	259.0	2.7%	264.8	2.2%	270.5	2.2%
Manufacturing	24.8	-5.3%	23.6	-4.8%	23.0	-2.5%
Mining	2.3	4.5%	2.3	0.0%	2.4	4.3%
Construction	14.1	-2.8%	14.7	4.3%	15.1	2.7%
TCPU[b]	10.0	6.4%	10.6	6.0%	10.9	2.8%
Trade	61.7	4.4%	62.9	1.9%	64.2	2.1%
FIRE[c]	11.6	1.8%	11.7	0.9%	11.9	1.7%
Services	75.6	3.1%	77.1	2.0%	78.9	2.3%
Government	59.0	5.5%	61.9	4.9%	64.1	3.6%

Notes:
a) Totals may not add due to rounding
b) Transportation, Communications, and Public Utilities
c) Finance, Insurance, and Real Estate

Source: Arizona Dept. of Economic Security, Research Administration, August 1992

Pima County

(Note: The updated forecast for Pima County was made prior to Hughes Aircraft Co.'s announcement in late August of plans to move about 2,700 jobs from California to its Tucson plant in 1993 (see " '92 Legislative Session ... ," p. 15)

RA forecasts that Pima County wage and salary employment will increase 2.2 percent, or 5,800 jobs, in 1992. This follows a growth rate of 2.7 percent in 1991. As for 1993, wage and salary employment is expected to grow 2.2 percent. Job growth is expected in each major industry group in both years with the exception of manufacturing, which will decline both years.

The construction industry is expected to lead Pima County's goods-producing sector in 1992, adding 600 jobs, for an increase of 4.3 percent. This gain would be in direct contrast to a 2.8 percent job loss in 1991. Though somewhat slower, continued growth in the construction sector is expected for 1993.

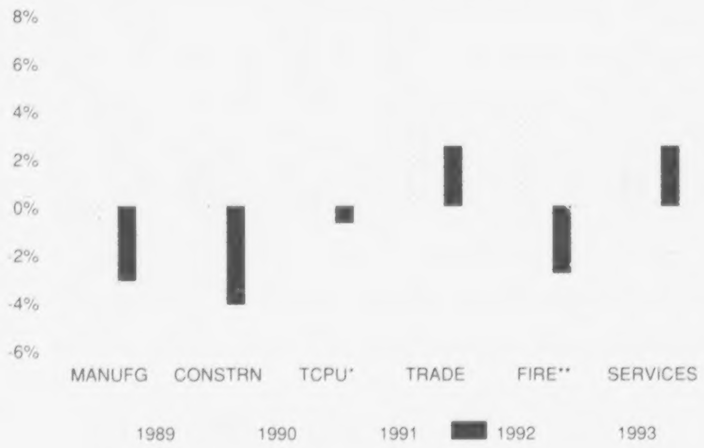
By contrast, Pima County's manufacturing sector is expected to reduce employment 4.8 percent in 1992. This follows a steep loss of 5.3 percent in 1991. For '92 and '93, employment losses in the durable goods sectors are expected to continue to offset gains in the non-durable sectors. Manufacturing employment is expected to decline an additional 2.5 percent in 1993.

Transportation, communications, and public utilities (TCPU) employment in Pima County has continued to increase due to the American Airlines reservation center, which opened in 1991. RA forecasts TCPU will end 1992 with a growth rate of 6 percent. For 1993, RA forecasts TCPU employment to grow 2.8 percent, a rate more reflective of historical industry patterns.

In 1991, Pima County's finance, insurance, and real estate (FIRE) industry group gained 200 jobs, the first annual gain since 1987. But the after-

Figure 7

Non-metropolitan Counties' Wage and Salary Employment Growth Rates, by Selected Major Industry Groups, Actual (1984-1991) and Projected (1992, 1993)



*TCPU = TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES
**FIRE = FINANCE, INSURANCE, AND REAL ESTATE

Source: Arizona Dept. of Economic Security, Research Administration, August 1992

Table 4

Non-metropolitan Counties' Labor Force, Employment, and Unemployment Data, Actual (1991) and Projected (1992, 1993)

(in Thousands)

	1991	Growth Rate	1992	Growth Rate	1993	Growth Rate
Labor Force	337.5	0.5%	349.9	3.7%	352.0	0.6%
Unemployment	32.4	-0.6%	43.3	33.6%	39.5	-8.8%
Unemployment Rate	9.6%	—	12.4%	—	11.2%	—
Total Employment	305.1	0.7%	306.6	0.5%	312.5	1.9%
Total Wage and Salary Employment[a]	254.3	2.4%	257.3	1.2%	262.2	1.9%
Manufacturing	19.5	-4.4%	18.9	-3.1%	19.1	1.1%
Mining	10.6	10.4%	11.1	4.7%	11.2	0.9%
Construction	12.3	-3.9%	11.8	-4.1%	11.8	0.0%
TCPU[b]	13.6	-2.2%	13.5	-0.7%	13.7	1.5%
Trade	63.7	3.4%	65.3	2.5%	66.6	2.0%
FIRE[c]	7.1	-2.7%	6.9	-2.8%	7.0	1.4%
Services	55.8	2.8%	57.2	2.5%	58.8	2.8%
Government	71.7	4.7%	72.6	1.3%	74.0	1.9%

Notes: a) Totals may not add due to rounding
b) Transportation, Communications, and Public Utilities
c) Finance, Insurance, and Real Estate

Source: Arizona Dept. of Economic Security, Research Administration, August 1992

affects from consolidation in the savings and loan industry are still being felt with marked differences in direction among FIRE sectors. Fairly strong gains in the real estate and insurance sectors are being offset by losses in the finance sector.

RA forecasts a modest gain in FIRE employment of nine-tenths of one percent, or 100 jobs, in 1992. For 1993, RA projects FIRE employment will increase 1.7 percent, or 200 jobs.

For more than a decade, Pima County's trade and services industries have managed to sustain annual job growth. Even with the rather weak national economy this year, RA forecasts trade and services employment will end up growing 1.9 percent (1,200 jobs) and 2 percent (1,500 jobs), respectively, in 1992. As for 1993, trade is expected to add another 1,300 jobs while services should increase by 1,800 jobs.

Government jobs in Pima County has shown fairly strong growth, primarily due to school-related employment. RA forecasts government employment will grow 4.9 percent in '92 with a slightly slower rate of growth of 3.6 percent expected in '93.

In 1991, Pima County's annual average unemployment rate of 3.8 percent was the lowest in more than a decade. Since then, however, the U.S. economy has remained weak and its resulted in higher jobless rates for the Tucson metropolitan area.

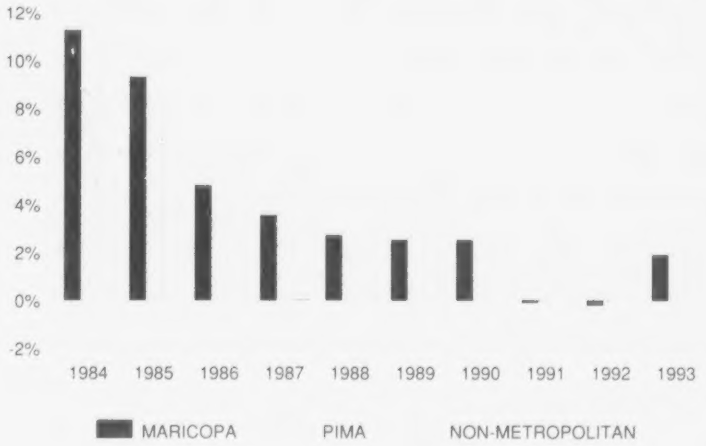
RA projects Pima's unemployment rate for 1992 will average a much higher 5.1 percent. But as the employment opportunities slowly begin to improve nationally, RA projects Pima County's jobless rate will improve slightly in 1993 to 4.8 percent..

Non-metropolitan Counties

The non-metropolitan counties as a whole should gain employment in both '92 and '83, but at growth rates much slower than in recent history. Wage and salary employment is expected grow 1.2 percent this year and 1.9 percent in '93. Since 1983, Arizona's rural counties as a whole have experienced growth in wage and salary employment of less than 2 percent only once — in 1988, when employment grew 1.9 percent.

Figure 8

Metropolitan Counties' vs. Non-metropolitan Counties' Wage and Salary Employment Growth Rates, Actual (1984-1991) and Projected (1992, 1993)



Source: Arizona Dept. of Economic Security, Research Administration, August 1992

RA forecasts jobs losses will occur in manufacturing, construction, TCPU, and FIRE in 1992. By 1993, however, job losses should end in three of these four industries, as all major industry groups, except construction (see below), are expected to gain employment.

Manufacturing employment in the non-metropolitan counties is forecast to follow a pattern similar to that forecast for Maricopa County — declining sharply in '92, but having moderate gains in '93. The rural counties should lose 600 manufacturing jobs in 1992, or a drop of 3.1 percent, then post a gain of 200 jobs, or 1.1 percent, in '93.

Construction employment in the non-metropolitan counties, on the other hand, is forecast to continue its downtrend, losing an additional 500 positions in 1992, then leveling off in 1993. Construction employment in the rural counties declined 3.9 percent in '91.

Most of the new jobs created in the rural counties in '92 and '93 will be in trade, services, and government. These three industry groups account for three-fourths of all the wage and salary jobs in the non-metropolitan counties and will add a combined 3,900 jobs in 1992 and 4,300 jobs in 1993.

Total unemployment in the rural counties, as is the case statewide, is expected to grow much faster than total employment in 1992, pushing the jobless rate up to 12.4 percent, an increase of 2.8 percentage points from 1991.. An expected decline in total unemployment in 1993 should help lower the unemployment rate to 11.2 percent. AET

Don Webbey and Dennis Doby,
RA Economists

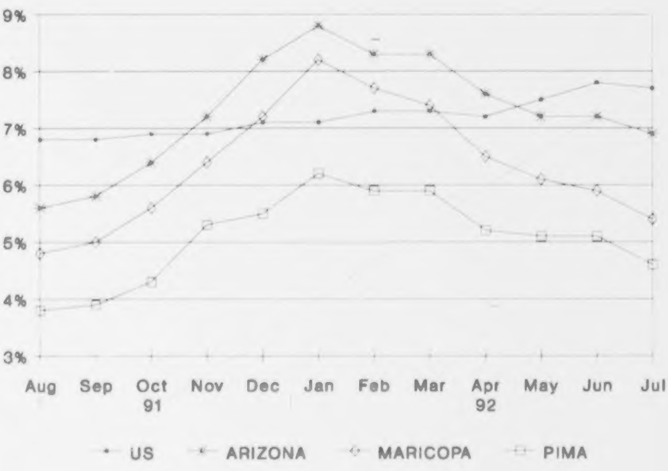
ARIZONA'S WORKFORCE

Jobless Rate Fell in July to 6.9%, But Job Growth Was Slow

Despite a slightly lower unemployment rate, Arizona's anemic economic performance continued in July. Over the past 12 months creation of nonfarm payroll jobs has remained barely positive (up 200) as job losses in manufacturing, transportation, and trade have offset job gains in construction, services, and government.

Figure 1

U.S., Arizona, Maricopa County, and Pima County Unemployment Rates (Seasonally Adjusted), August 1991-July 1992



Source: Arizona Dept. of Economic Security, Research Administration, August 1992

Statewide, the unemployment rate fell from 7.2 percent in June to 6.9 percent in July as only three counties (Apache, Coconino, and Santa Cruz) recorded higher unemployment rates. In the Phoenix metropolitan area (Maricopa County), the unemployment rate fell from 5.9 percent to 5.4 percent; in the Tucson metropolitan area (Pima County), the unemployment rate fell a similar magnitude, from 5.1 percent to 4.6 percent.

The state's lower unemployment rate was principally the result of a drop in the number of people entering the labor force and a smaller-than-seasonal decline in employment between June and July due to an expanded federal summer youth program. While that helped to keep the state's unemployment rate lower, it will limit the amount of employment increases at the end of the summer when schools reopen and summer youth jobs end.

Looking at employment by industry, trends of previous months continued in July. Arizona manufacturing employment, at 168,400, was unchanged from June, reflecting little or no movement within industry subgroups. Only of note was a loss of 300 jobs in the aircraft and missiles sector, which offset a gain of 300 jobs in the machinery sector.

In construction, after robust job growth between February and June, the pace slowed in July. Construction employment was only 100 positions above its June level. While Pima County added 300 construction jobs, this was offset by the loss of 300 construction jobs in Maricopa County.

Housing affordability remained excellent, however, and should help to support job growth in construction. But except for residential construction, the remaining segments of the industry are still some distance from recovery.

In July, the transportation industry had its first employment gain in six months. Unfortunately, the improvement was short-lived. All of the gain between May and June was lost in July. A total of 500 positions were cut with losses coming from urban and rural areas of the state.

Also, problems in the airline industry continue to be a drag on the state's economy. And with announcements of further layoffs in the months ahead, it looks as if additional losses in the transportation sector overall cannot be avoided. Transportation is currently at its lowest employment level of the past two years.

Trade Industry Remains Weak

While losses in the manufacturing industry continued to receive significant attention, the state's wholesale and retail trade industries continued to suffer, too. Once considered recession resistant, employers are scaling down staffing levels.

Eating and drinking places lost 1,500 jobs over the year, including a loss of 1,800 positions in July. Much of this can be attributed to consumer hesitancy to continue discretionary spending and to the slowdown in tourism activity.

Meanwhile, food store employment declined by 1,800 over the year, including a drop of 700 in July. Almost all of July's losses were concentrated in the Phoenix metropolitan area. Slower-than-forecast population growth, coupled with extremely competitive conditions in Maricopa County, forced grocery firms to cut costs wherever possible.

Finally, both the services and government sectors had significant employment losses in July, but they were principally expected seasonal changes. In services, employment cutbacks at hotels in the Phoenix and Tucson metropolitan areas accounted for all of the industry's losses. And in

(continued on back page)

Table 1

Arizona Labor Force, Employment, and Unemployment Data, July 1992(a)

(In Thousands)

				Monthly/Yearly Change	
	Jul. 1992(b)	Jun. 1992(c)	Jul. 1991	Jun. '92 - Jul. '92	Jul. '91 - Jul. '92
Total Civilian Labor Force(d)	1726.6	1748.4	1691.3	-21.8	35.3
Total Unemployment	125.5	135.9	98.3	-10.4	27.2
Unemployment Rate	7.3%	7.8%	5.8%	—	—
Unemployment Rate (Seasonally Adjusted)(e)	6.9%	7.2%	5.2%	—	—
Total Employment	1601.1	1612.5	1593.0	-11.4	8.1
Total Wage and Salary Employment(f, g)	1461.8	1478.5	1461.6	-16.7	0.2
Private Sector	1218.0	1222.4	1219.9	-4.4	-1.9
Government	243.8	256.1	241.7	-12.3	2.1
Goods-Producing Industries	265.2	265.2	267.8	0.0	-2.6
Manufacturing	168.4	168.4	174.9	0.0	-6.5
Total Durable Goods	124.4	124.3	131.8	0.1	-7.4
Stone, Clay, and Glass	5.2	5.2	5.5	0.0	-0.3
Primary and Fabricated Metals	13.7	13.7	14.3	0.0	-0.6
Primary Metals	5.6	5.6	6.0	0.0	-0.4
Fabricated Metals	8.1	8.1	8.3	0.0	-0.2
Machinery	52.9	52.6	55.1	0.3	-2.2
Aircraft and Missiles	21.6	21.9	26.3	-0.3	-4.7
Lumber and Wood Products (Excluding Furniture)	6.8	6.8	6.5	0.0	0.3
Total Nondurable Goods	44.0	44.1	43.1	-0.1	0.9
Food and Kindred Products	10.2	10.2	9.6	0.0	0.6
Printing and Publishing	15.5	15.6	15.7	-0.1	-0.2
Mining and Quarrying	14.3	14.4	13.7	-0.1	0.6
Copper Mining	12.0	12.0	11.2	0.0	0.8
Construction	82.5	82.4	79.2	0.1	3.3
Service-Producing Industries	1196.6	1213.3	1193.8	-16.7	2.8
Transportation, Communications, and Public Utilities	79.1	79.5	81.3	-0.4	-2.2
Transportation	44.9	45.4	47.2	-0.5	-2.3
Communications and Public Utilities	34.2	34.1	34.1	0.1	0.1
Trade	366.4	369.0	368.5	-2.6	-2.1
Total Wholesale Trade	73.9	74.2	74.2	-0.3	-0.3
Total Retail Trade	292.5	294.8	294.3	-2.3	-1.8
General Merchandise and Apparel	48.9	49.3	47.6	-0.4	1.3
Food Stores	48.6	49.3	50.4	-0.7	-1.8
Automotive and Service Stations	34.9	34.7	34.7	0.2	0.2
Eating and Drinking Places	101.6	103.4	103.1	-1.8	-1.5
Finance, Insurance, and Real Estate	92.1	92.0	92.6	0.1	-0.5
Services and Miscellaneous	415.2	416.7	409.7	-1.5	5.5
Hotels and Lodging Places	37.7	39.2	38.6	-1.5	-0.9
Business Services	87.7	87.0	85.8	0.7	1.9
Health Services	108.9	108.9	104.8	0.0	4.1
Government	243.8	256.1	241.7	-12.3	2.1
Federal	44.6	44.7	44.7	-0.1	-0.1

Notes and Source: See Table 3

Table 2

Maricopa County Labor Force, Employment, and Unemployment Data, July 1992[a]

(In Thousands)

				Monthly/Yearly Change	
	Jul. 1992[b]	Jun. 1992[c]	Jul. 1991	Jun. '92 - Jul. '92	Jul. '91 - Jul. '92
Total Civilian Labor Force[d]	1058.7	1071.9	1052.2	-13.2	6.5
Total Unemployment	62.0	68.7	51.8	-6.7	10.2
Unemployment Rate	5.9%	6.4%	4.9%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	5.4%	5.9%	4.5%	—	—
Total Employment	996.7	1003.2	1000.4	-6.5	-3.7
Total Wage and Salary Employment[f, g]	957.2	968.8	963.9	-11.6	-6.7
Private Sector	829.6	833.4	837.4	-3.8	-7.8
Government	127.6	135.4	126.5	-7.8	1.1
Goods-Producing Industries	181.0	181.2	183.6	-0.2	-2.6
Manufacturing	125.8	125.6	130.8	0.2	-5.0
Total Durable Goods	94.7	94.2	100.2	0.5	-5.5
Stone, Clay, and Glass	2.8	2.8	3.1	0.0	-0.3
Primary and Fabricated Metals	9.4	9.4	9.8	0.0	-0.4
Machinery	44.3	43.8	45.8	0.5	-1.5
Total Nondurable Goods	31.1	31.4	30.6	-0.3	0.5
Food and Kindred Products	7.3	7.3	6.9	0.0	0.4
Printing and Publishing	10.9	10.9	11.1	0.0	-0.2
Mining and Quarrying	0.7	0.8	0.8	-0.1	-0.1
Construction	54.5	54.8	52.0	-0.3	2.5
Service-Producing Industries	776.2	787.6	780.3	-11.4	-4.1
Transportation, Communications, and Public Utilities	55.4	55.5	57.4	-0.1	-2.0
Transportation	33.0	33.2	35.0	-0.2	-2.0
Communications and Public Utilities	22.4	22.3	22.4	0.1	0.0
Trade	238.7	240.7	244.2	-2.0	-5.5
Total Wholesale Trade	56.4	56.4	57.7	0.0	-1.3
Total Retail Trade	182.3	184.3	186.5	-2.0	-4.2
General Merchandise and Apparel	30.8	31.0	30.4	-0.2	0.4
Food Stores	30.2	30.7	31.9	-0.5	-1.7
Automotive and Service Stations	21.4	21.4	21.5	0.0	-0.1
Eating and Drinking Places	64.0	65.2	65.5	-1.2	-1.5
Finance, Insurance, and Real Estate	73.4	73.3	74.0	0.1	-0.6
Services and Miscellaneous	281.1	282.7	278.2	-1.6	2.9
Hotels and Lodging Places	22.1	23.2	22.2	-1.1	-0.1
Business Services	71.0	70.7	69.9	0.3	1.1
Health Services	70.4	70.5	67.8	-0.1	2.6
Government	127.6	135.4	126.5	-7.8	1.1

Notes and Source: See Table 3

Table 3
Pima County Labor Force, Employment, and Unemployment Data, July 1992[a]

(In Thousands)

	Jul. 1992[b]	Jun. 1992[c]	Jul. 1991	Monthly/Yearly Change Jun. '92 - Jul. '92	 Jun. '92 - Jul. '92
Total Civilian Labor Force[d]	320.7	322.6	307.3	-1.9	13.4
Total Unemployment	15.5	17.5	11.9	-2.0	3.6
Unemployment Rate	4.8%	5.4%	3.9%	—	—
Unemployment Rate (Seasonally Adjusted)[e]	4.6%	5.1%	3.6%	—	—
Total Employment	305.2	305.1	295.4	0.1	9.8
Total Wage and Salary Employment[f, g]	256.3	257.2	249.2	-0.9	7.1
Private Sector	204.0	203.3	199.0	0.7	5.0
Government	52.3	53.9	50.2	-1.6	2.1
Goods-Producing Industries	41.6	41.2	41.6	0.4	0.0
Manufacturing	23.9	23.8	24.8	0.1	-0.9
Total Durable Goods	18.5	18.5	19.6	0.0	-1.1
Total Non-durable Goods	5.4	5.3	5.2	0.1	0.2
Mining and Quarrying	2.3	2.3	2.3	0.0	0.0
Construction	15.4	15.1	14.5	0.3	0.9
Service-Producing Industries	214.7	216.0	207.6	-1.3	7.1
Transportation, Communications, and Public Utilities	10.4	10.6	10.2	-0.2	0.2
Transportation	5.8	6.0	5.8	-0.2	0.0
Communications and Public Utilities	4.6	4.6	4.4	0.0	0.2
Trade	63.3	63.1	60.6	0.2	2.7
Total Wholesale Trade	9.4	9.3	9.0	0.1	0.4
Total Retail Trade	53.9	53.8	51.6	0.1	2.3
General Merchandise and Apparel	8.0	8.1	7.6	-0.1	0.4
Food Stores	8.1	8.2	8.1	-0.1	0.0
Automotive and Service Stations	5.7	5.7	5.6	0.0	0.1
Eating and Drinking Places	18.7	19.0	18.3	-0.3	0.4
Finance, Insurance, and Real Estate	11.8	11.8	11.7	0.0	0.1
Services and Miscellaneous	76.9	76.6	74.9	0.3	2.0
Hotels and Lodging Places	6.2	6.5	6.3	-0.3	-0.1
Business Services	12.6	12.3	11.7	0.3	0.9
Health Services	23.2	23.1	22.5	0.1	0.7
Government	52.3	53.9	50.2	-1.6	2.1

Notes:
a) Data on labor force, total unemployment, total employment, and seasonally adjusted unemployment rate should not be used for economic-assistance programs. Data for economic-assistance programs are available by contacting DES, Research Administration
b) Preliminary and subject to revision following month
c) Revised
d) Adjusted to Current Population Survey (CPS) to reflect place of residence
e) Normal seasonal variations have been eliminated to reflect underlying trends
f) By place of work; does not include agricultural workers, self-employed, unpaid family members, and domestic workers
g) Detail may not add up correctly due to rounding
h) Rounded to the nearest one-quarter

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, August 1992*

Table 4

Non-metropolitan Counties' Labor Force, Employment, and Unemployment Data, July 1992(a,b)

	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz
Total Civilian Labor Force(d)	13,900	36,775	44,600	14,275	8,450	3,550	7,425
Total Unemployment	2,900	3,025	4,400	1,675	850	350	675
Unemployment Rate	20.9%	8.2%	9.8%	11.8%	10.1%	9.7%	9.2%
Unemployment Rate (Seasonally Adjusted)(e)	16.9%	8.0%	8.6%	11.7%	9.9%	9.7%	9.0%
Total Employment	11,000	33,750	40,200	12,600	7,600	3,200	6,750
Total Wage and Salary Employment(f,h)	13,725	25,975	40,475	12,150	5,050	3,375	3,375
Private Sector	9,550	15,475	29,650	9,275	3,050	2,825	2,525
Government	4,175	10,500	10,825	2,875	2,000	550	850
Goods-Producing Industries	800	2,300	40,475	3,425	400	2,300	575
Manufacturing	475	1,125	2,975	1,425	225	25	250
Mining and Quarrying	25	125	125	1,225	0	2,025	50
Construction	300	1,050	1,575	775	175	250	275
Service-Producing Industries	12,925	23,675	35,800	8,725	4,650	1,075	2,800
Transportation, Communications, and Public Utilities	1,675	1,500	2,550	425	175	50	150
Trade	1,775	5,725	10,750	2,725	1,475	300	1,200
Finance, Insurance, and Real Estate	375	625	750	250	125	25	125
Services and Miscellaneous	4,925	5,325	10,925	2,450	875	150	475
Government	4,175	10,500	10,825	2,875	2,000	550	850

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
Total Civilian Labor Force(d)	39,500	26,925	40,225	12,175	41,800	57,525
Total Unemployment	3,125	4,125	4,025	2,450	2,775	17,625
Unemployment Rate	7.9%	15.3%	10.0%	20.1%	6.7%	30.6%
Unemployment Rate (Seasonally Adjusted)(e)	8.1%	12.4%	9.2%	14.8%	6.7%	19.6%
Total Employment	36,375	22,800	36,200	9,725	39,025	39,950
Total Wage and Salary Employment(f,h)	27,675	20,275	29,950	10,400	28,125	27,875
Private Sector	22,750	15,100	21,300	8,575	23,575	20,850
Government	4,925	5,175	8,650	1,825	4,550	7,025
Goods-Producing Industries	5,175	3,650	9,300	1,375	5,675	3,050
Manufacturing	2,550	1,675	2,975	1,000	2,500	1,650
Mining and Quarrying	50	1,100	5,500	0	1,000	0
Construction	2,575	875	825	375	2,175	1,400
Service-Producing Industries	22,500	16,625	20,650	9,025	22,450	24,825
Transportation, Communications, and Public Utilities	1,400	1,450	875	650	1,050	1,275
Trade	8,700	4,700	5,475	4,525	8,200	8,925
Finance, Insurance, and Real Estate	1,250	525	625	275	1,000	1,000
Services and Miscellaneous	6,225	4,775	5,025	1,750	7,650	6,600
Government	4,925	5,175	8,650	1,825	4,550	7,025

Notes and Source: See Table 3

Table 5

Estimated Hours and Earnings of Production Workers, by Selected Industry Groups, July 1992(a)

Arizona

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	**July 1992(b)**	**June 1992(c)**	**July 1991**	**July 1992(b)**	**June 1992(c)**	**July 1991**	**July 1992(b)**	**June 1992(c)**	**July 1991**
Manufacturing	$444.69	$443.19	$432.55	40.5	40.4	40.2	$10.98	$10.97	$10.76
Aircraft and Missiles	673.86	686.43	662.39	45.5	46.1	45.4	14.81	14.89	14.59
Food and Kindred Products	366.60	367.25	339.44	39.0	37.9	37.8	9.40	9.69	8.98
Primary Metals	501.01	487.60	495.46	41.1	40.0	39.7	12.19	12.19	12.48
Machinery	458.46	449.85	426.52	40.5	40.6	40.2	11.32	11.08	10.61
Copper Mining	657.49	645.61	648.61	43.6	43.8	42.7	15.08	14.74	15.19
Construction	462.52	463.69	450.45	38.9	38.9	37.6	11.89	11.92	11.98
Public Utilities	788.95	787.52	761.24	42.6	43.8	43.4	18.52	17.98	17.54
Retail Trade(d)	283.84	284.72	273.84	32.7	33.3	32.6	8.68	8.55	8.40
Wholesale Trade	389.25	392.74	409.55	37.5	37.8	37.3	10.38	10.39	10.98

Maricopa County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	**July 1992(b)**	**June 1992(c)**	**July 1991**	**July 1992(b)**	**June 1992(c)**	**July 1991**	**July 1992(b)**	**June 1992(c)**	**July 1991**
Manufacturing	$470.67	$470.50	$455.22	41.8	41.6	40.9	$11.26	$11.31	$11.13
Construction	478.71	477.06	477.12	39.4	39.2	38.2	12.15	12.17	12.49
Retail Trade(d)	303.74	301.83	283.47	33.6	33.8	33.0	9.04	8.93	8.59
Wholesale Trade	393.95	394.80	424.13	37.2	37.6	37.7	10.59	10.50	11.25

Pima County

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
Industry	**July 1992(b)**	**June 1992(c)**	**July 1991**	**July 1992(b)**	**June 1992(c)**	**July 1991**	**July 1992(b)**	**June 1992(c)**	**July 1991**
Manufacturing	$404.83	$406.84	$414.80	38.3	38.6	40.0	$10.57	$10.54	$10.37
Construction	413.98	409.58	394.74	37.6	37.1	37.1	11.01	11.04	10.64
Public Utilities	671.10	656.21	641.24	42.8	42.2	41.0	15.68	15.55	15.64

Notes:
a) Estimates are based on a sample of full- and part-time production and related workers whose payroll and hours are reported for the pay period that includes the 12th of the month
b) Preliminary and subject to revision following month
c) Revised
d) Excludes eating and drinking places

Source: *Prepared by the Arizona Dept. of Economic Security, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, August 1992*

'92 Legislative Session Focused on Job Development

In a year when statewide wage and salary job growth has been anemic — one-tenth of 1 percent over-the-year growth in August — economic development and tax-incentive legislation took center stage during the 1992 Arizona legislative session. More than a half-dozen, economic-development or tax-incentive bills were passed by the second regular session of the 40th Arizona Legislature and signed into law by Gov. Fife Symington.

Table 1

Major Economic-Development Legislation Passed in 1992

✔ H.B. 2201 — offers tax credits to qualifying defense-related companies that increase defense or commercial employment; also creates military re-use zones at closed military bases

✔ H.B. 2211 and H.B. 2297 — offer tax breaks on the purchase of airline fuel and operating equipment

✔ H.B. 2258 — offers a 50 percent rebate on sales and use taxes for movie-production companies that spend $1 million in the state within a 12-month period

✔ H.B. 2490 — makes several technical changes in state's enterprise-zone law, including allowing administrative expansion of the size of the zone

✔ H.B. 2437 and H.B. 2560 — offer tax credits for businesses conducting research and development activities in Arizona

NEWS ANALYSIS

The economic-development legislation, along with the defeat of a group of bills that would have increased workers' compensation benefits, sent a strong message to business: in a competitive national and worldwide climate, Arizona wants to offer an oasis for companies seeking lower operating costs, particularly from higher taxed and regulated states like California. And by the actions of one employer and the anticipated movement of others, it appears the message may be working.

The most far-reaching piece of job-development legislation the Legislature passed was H.B. 2201, designed to encourage stability and growth among companies in the state's declining defense-manufacturing sector, which has seen a drop of 5,000 wage and salary jobs in the past year. The law provides a series of tax credits over five years for qualifying companies who increase employment for defense industry or commercial projects. In addition, it gives incentives to aerospace and aircraft manufacturers relocating to closed military bases (called military re-use zones), such as Williams Air Force Base.

Arizona is the first state to enact this type of legislation, giving the state "a window of opportunity" to take competitive advantage, says Lois Yates, Director of Strategic Planning and Economic Development for Arizona's Department of Commerce. And it appears the law has already begun paying dividends.

In early September, Hughes Aircraft Co. announced plans to move 2,700 jobs — estimated to pay an average of $35,000 a year — to Tucson primarily from missile-production plants in Southern California. Hughes, which in recent years has been dramatically downsizing its Tucson missile-production operations, cited as major reasons for the move an estimated $25 million in tax breaks that will be generated over five years by the newly passed legislation, along with lower operating and regulatory costs, and excess capacity at its Tucson site. The tax credits are expected to be more than offset by employee personal income and sales taxes, as well as by an estimated three additional jobs created for every one created by Hughes.

At a time when high-paying jobs are at a premium, particularly in the defense industry, the move was a major coup for the state. And there may be more to come shortly. An unnamed "major aerospace company" will be announcing its move to the state by the end of October, and a number of companies that would benefit from the defense-restructuring law are looking seriously at relocating to Arizona, Yates says.

Among other economic-development legislation approved were: two bills offering tax breaks to stimulate air transportation business in the state; another law giving tax rebates to movie production companies; a bill allowing for the expansion of previously designated enterprise zones; two bills offering tax credits for research and development expenses; and $600,000 to maintain trade offices in Mexico and Taiwan.

H.B. 2211 and H.B. 2297 offer tax breaks on the purchase of airline fuel and operating equipment, respectively, with both bills expected to aid ailing America West Airlines, but also encourage expansion by other airlines. The former phases out over a period of several years taxation on the purchase of jet fuel above 10 million gallons a year, while the latter exempts sales and use taxes on equipment ranging from clothing to flight simulators.

Meanwhile, H.B. 2258 offers a 50 percent rebate on sales and use taxes for movie-production companies that spend $1 million in the state within a 12-month period making one or more movies. Although the amount saved may not be an significant windfall to producers of multi-million dollar pictures, "we think it makes a statement that we want their business," Yates says. An estimated $50 million was spent in Arizona on movie, television, and commercial productions in 1991, according to a story in *The Arizona Republic.*

In H.B. 2490, several technical changes were made to the state's enterprise-zone law. Of these, the most significant adjustments allow the Arizona Department of Commerce to administratively expand by one-quarter square mile, or 5 percent, the size of the zone (to avoid making jurisdictions re-apply for a new zone), and give companies tax credits for hiring dislocated workers. Previously, businesses in state-designated enterprise zones, located in high unemployment areas, only received tax credits for hiring qualified low-income workers.

Two laws enacted that are designed to spur research and development — and with it high-paying jobs, Yates says — are H.B. 2437 and H.B. 2560. The former offers tax credits, beginning in January 1994, between $25,000 and $250,000 for R&D conducted at businesses and universities in Arizona, while the latter exempts sales and use taxes on machinery used for R&D purposes beginning in January 1993

Also, a bill passed that could fall under the area of economic development abolished the requirement that businesses with combined sales, telecommunication services and county excise tax liabilities of $100,000 a year to remit estimated monthly tax payments. H.B. 2174 now allows those companies starting in July 1993 to pay tax amounts on the 20th of the following month, except for June, thus saving those companies an estimated $4 million in lost interest each year, according to *Outlook*, a publication of the Tucson Metropolitan Chamber of Commerce.

Among other legislation passed that affects business and employment are: a law requiring a committee to look at regulatory reform in state government to identify "unnecessary, costly, duplicative or overly burdensome rules and licensing requirements that adversely affect the interests of the state economy ... "; a bill clarifying what entity is responsible for payment of wages and taxes when a worker is leased or loaned by a company, or employed by a temporary-services company; a law authorizing a study committee to look at international commercial disputes between Arizona and Sonora, Mexico; and a bill to increase the maximum penalty — from $10,000 to $70,000 — for repeated violations of Arizona Occupational Safety and Health Act (AOSHA) regulations, in order to comply with changes in federal OSHA law.

Although the session was termed a success by most economic-development officials, one piece of legislation considered vital for attracting out-of-state business languished without a vote for the second year in a row. Several versions of a bill to create an employment-training program for new and expanding companies were drafted during the session, but none made it through both houses.

The reason was the same as in 1991. The training bills became tied to legislation to improve a wide variety of workers' compensation benefits, which opponents said would have raised employers' workers' comp premiums. The sponsor of the workers' comp legislation (S.B. 1061), Sen. Manuel Peña, however, said money for additional benefits could have come out of existing state funds.

"Job training is important to everything. They (companies) expect it," Yates says, pointing out the state recently lost out on a business relocation worth 350 jobs because Arizona is one of five states that lack a state-funded worker-training program. In the absence of the bill, though, some federal job-training money is expected to be targeted to train workers for business relocation, Yates says. But employment-training legislation will be brought up again in 1993, she says.

The defeat of the workers' compensation legislation may have symbolized what was not considered a successful overall session for organized labor in terms of bills dealing with core issues (e.g., workers' rights), says Mike Shea, a spokesperson for the state AFL-CIO. Although Shea adds, in terms of economic-development legislation designed to create jobs, he believes the session was "very successful."

Among bills pushed by organized labor that failed to make it through the legislative process this year were:

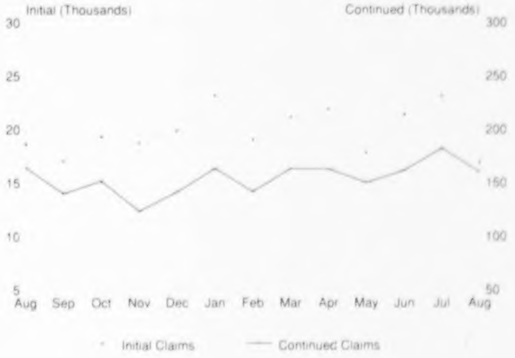
- S.B. 1396, which would have created a workers memorial at Wesley Bolin Plaza to honor those who have died while on the job.
- S.B. 1238, which would have made non-union employees liable for representation expenses incurred by a labor organization that processes employment-related grievance on their behalf. Because Arizona is a right-to-work state, employees are not required to join a union, but still are eligible for union representation.
- S.B. 1395, calling for the reinstatement of the "Little Davis Bacon Act," which was repealed in 1984. The law would require contractors dealing with state, county, and municipal governments to pay workers the "prevailing wage" — a wage designated by the federal government as an average for a number of skilled occupations. Shea says the law is needed because a number of contractors have been able to make low bids on projects because they are paying low wages to unskilled workers.
- S.B. 1384, which would have allowed collective bargaining for state employees. The bill would have empowered an employee representative (i.e., Arizona Federation of State, County, and Municipal Employees (AFSCME)) to bargain for wages and benefits in behalf of most state employees. If no agreement can be reached, binding arbitration would be used to settle disputes. State employees are prohibited by law from going out on strike.
- H.B. 2169, a privacy rights bills that would have prevented employers from taking disciplinary or discriminatory action against employees as a result of lawful activities an employee

ARIZONA LABOR MARKET INDICATORS

"Arizona Labor Market Indicators," a quick glimpse at data relevant to Arizona's job market, will appear most months in *Arizona Economic Trends*. Some of the data that had appeared each month in the *Arizona Labor Market Information Newsletter*, such as the U.S. and Phoenix-area consumer price indices, will appear at least once a quarter in *Arizona Economic Trends*. If you need this information more frequently, contact Research Administration at 542-3871.

Figure 1

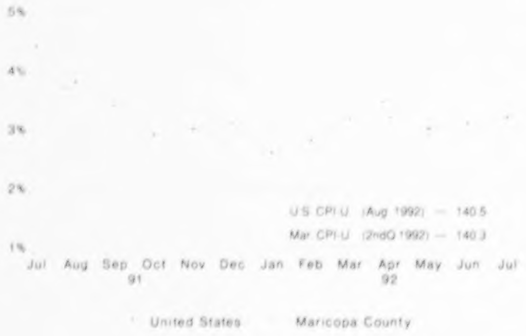
Arizona Continued and New Unemployment Insurance Claims, August 1991-August 1992



Source: *Arizona Dept. of Economic Security, Research Administration, September 1992*

Figure 2

Over-Year Pct. Change in U.S. (Monthly) and Maricopa County (Quarterly) Consumer Price Indecies, July 1991-July 1992



Sources: *U.S. Dept. of Labor, Bureau of Labor Statistics, August 1992; and Arizona State University, Economic Outlook Center, July 1992*

engages in while off-premises during non-working hours. Examples include a company that requires overweight employees to pay higher health-care premiums or dismissal of workers who smoke or drink at home.

- S.B. 1401, which would have extended the state's "whistleblower" law to cities and universities, and make it also apply to probationary employees.
- S.B. 1294, which would establish a minimum-wage law in Arizona that is similar to the federal law (which the state falls under), but among other items would use a lower standard ($100,000 in gross sales instead of $500,000) to exempt employers from having to pay a minimum wage (currently $4.25 an hour).
- S.B. 1457, which would have guaranteed the availability of private market group health insurance coverage for small employers who have been denied coverage because an employee or dependent has existing medical problems. An estimated 600,000 working Arizonans and their families are without health coverage.

There were several bills, however, that labor, as well as other interest groups supported that passed. These included a group of bills to improve state retirement benefits and a state employment-disabilities law patterned after the federal law that recently went into force.

Among the state retirement changes, S.B. 1260 provides for a 5 percent cost-of-living adjustment for all persons who retire by October 31, and H.B. 2242 provides a number of minimum benefit level for retirees and beneficiaries of deceased members who are at least 75 years of age by September 30.

Finally, in S.B. 1355, the Legislature restructured the state's version of the federal welfare-to-work Job Opportunities and Basic Skills Training (JOBS) program. Previously, the state's program targeted the "hard-to-serve," or those with the highest employability barriers (e.g., lack of education), which restricted the number of persons who could be served. But beginning October 1, the JOBS program will offer three separate tracks designed to re-employ a wider variety and larger number of welfare recipients. AET

—Brent Fine
Arizona Economic Trends Editor

Industry Update

"Industry Update" — featured each month as a service to our readers — is a compilation of public announcements and articles from newspapers and periodicals about business events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of industry news is not feasible. In addition, Arizona Economic Trends is not responsible for incorrect information reported by these sources.

Manufacturing

McDonnell Douglas Corp. is looking to **sell entirely or find a partner for its helicopter company** which employs about 3,200 workers in Mesa. McDonnell Douglas Helicopter Co. has been downsizing its workforces in Mesa and Culver City, Calif., in recent years due to defense cutbacks that have reduced sales of its AH-64 Apache attack helicopter. The nation's third-largest helicopter company has recently been targeting commercial markets with its revolutionary NOTAR (no-tail rotor) helicopter, but the parent firm now wants to devote most of its attention to its commercial and military aircraft business.

As part of a cost-cutting plan, **Motorola Corp.'s Computer Group** is **moving a unit** that makes hardware and software systems for business applications from **San Jose to Tempe**. However, some of the 130 workers in San Jose's commercial-systems unit will be laid off, reducing the net gain of jobs in Tempe, while others will transfer from California.

A Boston plastics manufacturer that previously announced plans to locate a manufacturing and distribution center in Tolleson (see *AET*, June 1992), may be making Phoenix the home of its western division. **Carlisle Plastics Inc.** has received approval for a low-interest, $425,000 loan from the Arizona Commerce and Economic Development Commission, contingent on the company **establishing a 100-employee regional office in the Valley**. About three-quarters of the workers would be hired locally.

A family dispute has caused the **closure of Southwest Meat Co. of Yuma**, forcing the layoff of 21 employees. The 35-year-old business supplied meat products to area schools, government institutions, and restaurants.

Construction

Eldorado Holdings Inc. of Phoenix plans to **develop 432 acres in Gilbert**, known as Continental Tech Center, into a 500-home, golf-course community and 134-acre business park. Eldorado bought the property for $5.1 million in August from the Resolution Trust Corp., the arm of the federal government responsible for liquidating assets from failed thrifts. The property, about **11/2** miles from the Superstition Freeway, is between McQueen Road on the east and Arizona Avenue on the west.

SunCor Development Inc. announced it will **build about 800 single-family homes** near Mayo Clinic-Scottsdale as part of a $200 million master-planned community. The custom and semi-custom residences will be located on 500 acres, with another 900 acres left vacant for aesthetic purposes.

About **25 to 30 jobs** are expected to created within the next several months by the **building of new hangars at Prescott's airport**. The half-million dollar project was awarded to Bell Building Systems of Prescott, but a controversy over the bidding process could possibly delay start of construction.

Mining

Magma Copper Co. of Tucson plans to start an **open-pit copper mine near Florence** within five years. The mine and related operations would employ about 300 workers, however it's likely most employees will come from a mine near San Manuel that is expected to be depleted by 1994. Magma paid about $22 million for private acreage and state-land leases three miles north of Florence, which is estimated to have about 6 billion pounds of copper.

In related news, the August issue of Standard and Poor's *Investor Monthly* projects **good times for the copper industry** due to higher demand and prices for copper, along with technological improvements that have cut the cost of production. The price of copper increased from $0.97 per pound in January to $1.20 per pound in July. ASARCO Inc., which operates several mines in Arizona, is one company rated high by the newsletter.

Transportation, Communications, and Public Utilities

Most of **120 employees laid off** by Lockheed Aeromod Center in July due to slack work were **recalled in late August** by the Tucson aircraft-maintenance center. A large amount of repair work on a Lockheed L-1011 jumbo jet necessitated the call back, along with anticipation that a busy fall workload will develop.

A change in routes has forced about **one-third of Yellow Freight Systems' drivers** located in Flagstaff to be **transferred to other sites** around the country. The loss of the 50 drivers, who make about $40,000 a year, is expected to be an economic blow to Flagstaff, which is one of several relay points for Yellow Freight on the route between Albuquerque and Los Angeles.

Mead Energy Co. has received approval from the Federal Energy Regulatory Commission to **build a pumped storage hydroelectric plant** on the south side of Lake Mead, at Spring Canyon Wash, to produce electric power during peak-demand hours for nearby Hoover Dam. About 2,500 construction workers, many from northwest Arizona, would be needed to build the facility, which would employ between 50 and 75 permanent workers once completed.

Pending approval for local, state, and federal permits, construction would begin in 1997 and be completed a year later.

Union workers with U S West came to terms with the telecommunications company in late August on a three-year agreement that calls for wage raises of 12 percent over the life of the contract. The contract affects 5,000 Arizona workers for U S West, which operates in 14 states in the Midwest and West.

Alaska-based MarkAir will **begin servicing Phoenix** Sky Harbor International Airport in September, when it offers one flight between Phoenix and Seattle. MarkAir, which previously concentrated on Alaska cities, recently began more aggressively competing with Seattle-based Alaska Airlines by offering flights to other West Coast destinations.

Trade

Construction is expected to begin in November on a **PACE Membership Warehouse near the Tucson Mall**. The 108,000-square-foot discount store has a planned opening of spring 1993 and is expected to create about 150 jobs. The PACE facility will be part of a 29-acre NorthMall Center that will have several other major retailers and restaurants. Construction of those yet unnamed stores is expected to also begin around November.

Services

About one-half of the 80 employees of **Gannett Outdoor Inc. in Phoenix were laid off** in mid-August after the billboard company was sold to former Circle K Corp. President Karl Eller. Eller, who subsequently sold one-half of his share to Phoenix-based Outdoor Systems Inc., said that layoffs were part of an efficiency move and that some of the work previously performed by the laid-off workers will be contracted outside.

Work has begun on **$16 million in improvements for Desert Samaritan Medical Center in Mesa**, including $3.8 million for a new 18,500-square-foot emergency room and $3 million for a 15,000-square-foot ambulatory surgery center. The emergency room is expected to be finished by next summer, while the surgery facility should be completed by the end of 1992. No information is available on whether the improvements will generate additional jobs for the 345-bed hospital.

Willow Creek Hospital and Treatment Center in Phoenix **laid off most of its employees** in mid-August due to the closure of its in-patient treatment center. The 17-bed mental-health facility, which at one time had employment as high as 45, transferred its inpatients to Scottsdale Camelback Hospital.

Occupancy rates for Valley hotels and resorts for the second quarter of 1991 were **5 percentage-points higher** than during the same three-month period in 1991. The second-quarter rate in 1992 was 65.4 percent versus 60.6 percent in '91, and for the six months ending June 30, the rate in '92 was 70.3 percent, up from 68.1 percent in '91. Lower airline fares, discount packages, and a rise in international tourism accounted for the increase. Among Valley cities, Scottsdale posted the largest percentage-point gains in the second quarter. An occupancy rate of 70 percent is considered healthy.

The **Snowbowl ski resort near Flagstaff was sold** to an unidentified buyer in late August, after several previous attempts to sell the 787-acre property were unsuccessful. Snowbowl, which had one of its most successful seasons this past winter, was established in 1938 and operates 130 acres of ski runs. Despite its recent success, the company that owned Snowbowl, Arkansas-based Fairfield Communities, decided to sell the ski resort to help pay off debts.

Government

Northern Arizona University (NAU) has announced plans to **eliminate as many as 17 degree programs** beginning with the 1992-93 school year, which would affect 2,000 students and force the layoff of an estimated 135 faculty members. A final decision on cutbacks, which would save an estimated $3.5 million dollars from a strapped budget, are expected in late November.

Ground should be broken in November on a **250-bed, minimum-security prison in Apache County** that is expected to initially employ 112 people (90 locally). The $8-$10 million prison, which will be located on U.S. 180/666 near Lyman Lake about halfway between St. Johns and Springerville, is expected to be operational by late spring or early summer.

Although the Defense Department is cutting its budget, the **U.S. Army still needs "a few good people"** for its active and reserve forces, reports the Army's recruitment office in Phoenix. For fiscal year 1992 (Oct. 1, 1991-Sept. 30, 1992), the Army will enlist 75,000 active and 52,500 reserve soldiers, ages 17 to 34. Most of those recruited will serve only one term, or four years, says an Army press release. Among benefits offered by the Army are a wide range of transferrable skills, the Montgomery G.I. Bill, and up to $25,200 in college benefits. For additional information, contact the Phoenix recruitment office at 254-1981.

Miscellaneous

Does an ostrichburger sound appetizing? how about Cornish ostrich or ostrich a l'orange? Well, one New Jersey businessman is betting there is a market for ostrich meat and hopes to **develop the world's largest ostrich ranch in Arizona**. Meet telecommunications entrepreneur Thomas Pucci, who recently purchased a 6,500-acre cattle ranch near Wickenburg. Pucci's plan: start out with 17 pair of ostriches (which cost a cool million), then let nature take its course — and within five years, 100,000 ostriches running wild around the ranch. By then, Pucci expects to have between 30 and 40 workers trying to keep up with these birds. But in case Pucci's plans are a pipe dream (or pipe nightmare), don't apply for work at your nearest Job Service just yet.

Recession Not Indicated, Economic Variables Show

(continued from front page)

up to 3 percent in 1993. On a quarterly basis, real GDP growth is expected to peak in the first quarter of 1993 then level off. Thus, continued sluggish growth is expected for the remainder of 1992 with both the nation's and Arizona's economies improving in 1993.

Some of WEFA's other national economic predictions expected to impact the U.S. and Arizona economies include:

- a cautious Federal Reserve that will not further reduce interest rates unless recessionary data persist.
- the government sector, often a source of strength in a recovery, continuing to be a drag on GDP throughout the forecast horizon.
- establishment employment continuing to rise from its trough in January. Improved job prospects in the latter half of 1992 will bring people into the labor force, making the national unemployment rate remain above 7 percent through the end of 1992.
- a federal funds rate that is expected to remain below 4 percent until the fourth quarter of 1993. Long-term rates, however, are expected to rise over the next three years as inflation and business activity increase and the Federal Reserve begins to push up the federal funds rate.
- total real business fixed investment that is expected to register a 1 percent gain in 1992 and expand by 5.6 percent in 1993. Construction data indicate the decline in industrial structures may be behind us. Other structures, including hospitals, may have bottomed out as well. Once the recovery is under way, equipment expenditures are expected to be robust. **AET**

—DES, Research Administration

Jobless Rate Fell to 6.9% in July, But Growth Slow

(continued from page 9)

government, the closure of schools for summer vacation continued to have its usual impact. But additional federal funding for summer youth jobs helped soften government losses.

In summary, the summer doldrums and a weak national economy were the most significant factors affecting Arizona's economy in July. And the state's job market will probably continue to move sideways for at least the next few months. Without an improved national economy, Arizona can expect little economic improvement in the months ahead. **AET**

—Dan Anderson,
Research Administrator

ARIZONA ECONOMIC TRENDS

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